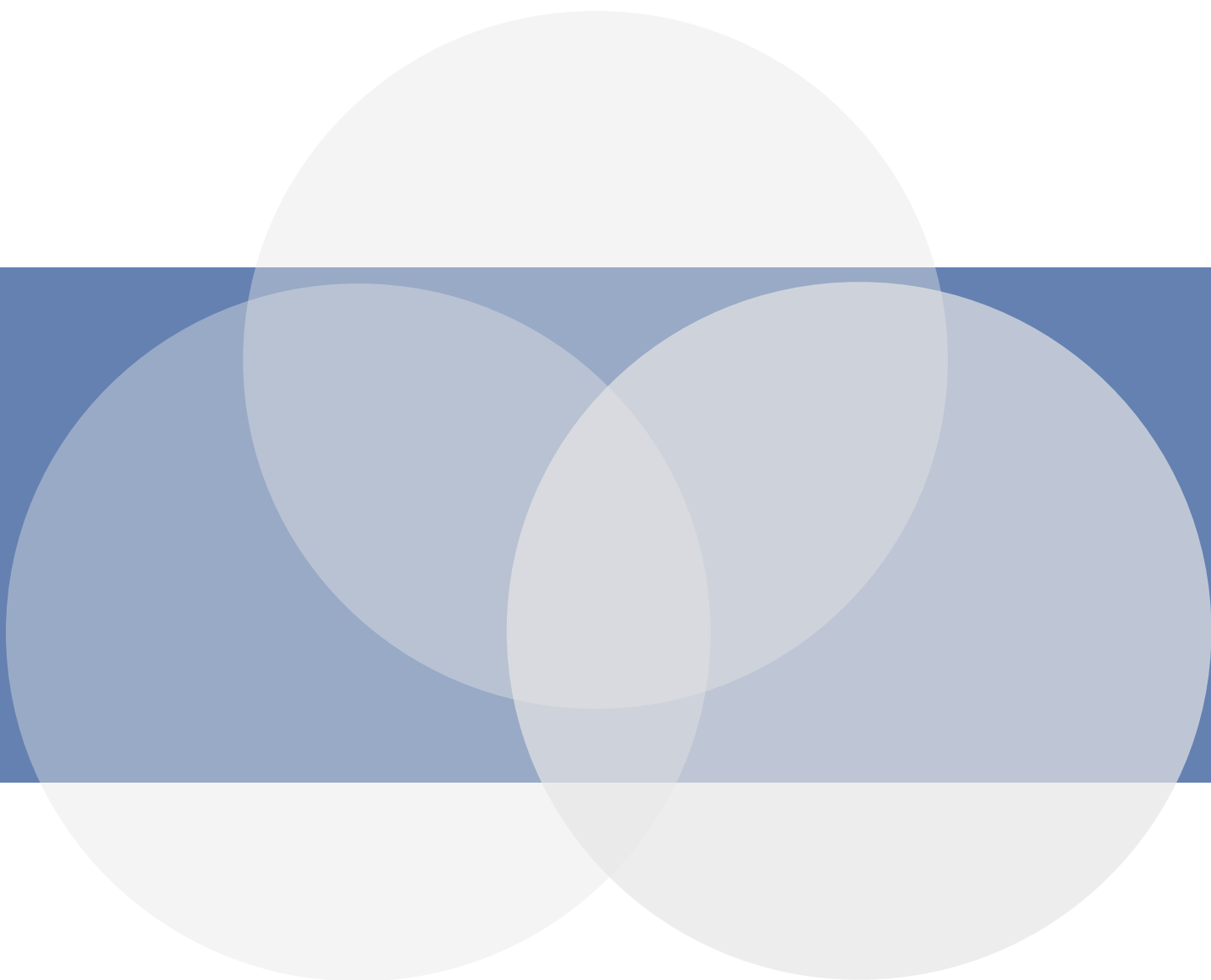


FLEXIBLE LEARNING PATHWAYS IN BRITISH HIGHER EDUCATION: A DECENTRALIZED AND MARKET-BASED SYSTEM

John Brennan



Report for the IIEP-UNESCO Research 'SDG 4: Planning for flexible learning pathways in higher education'

FLEXIBLE LEARNING PATHWAYS IN BRITISH HIGHER EDUCATION: A DECENTRALIZED AND MARKET-BASED SYSTEM

Report for the IIEP–UNESCO Research ‘SDG 4: Planning for flexible learning pathways in higher education’

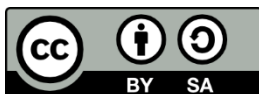
Author’s affiliation

John Brennan – Emeritus Professor of Higher Education Research (*Open University*), Visiting Professor (*University of Bath* and *London School of Economics*), and Honorary Research Fellow (*University of Oxford*)

This report was prepared for the IIEP–UNESCO research ‘SDG 4: Planning for flexible Learning Pathways in Higher Education’. The project aims to produce knowledge and provide evidence-based policy advice to ministries of (higher) education, in different development contexts, that are considering building or strengthening flexible learning pathways as an area of reform. It comprises a stocktaking exercise, an international survey, eight in-depth country case studies (Chile, Finland, India, Jamaica, Malaysia, Morocco, South Africa, and the UK) and thematic studies. This report is one of the eight in-depth country case studies.

UNESCO has attributed to the Quality Assurance Agency for Higher Education (QAA) the right to publish this report. The views and opinions expressed in this research report are those of the authors and do not necessarily represent the views of UNESCO, IIEP or QAA.

This study is available in Open Access under the Attribution-ShareAlike 3.0 IGO (CC-BY-SA 3.0 IGO) license (<http://creativecommons.org/licenses/by-sa/3.0/igo/>). By using the content of this study, the users accept to be bound by the terms of use of the UNESCO Open Access Repository (<http://www.unesco.org/open-access/terms-use-ccbysa-en>). The present licence applies exclusively to the text content of the study.



International Institute for Educational Planning
7-9 rue Eugène Delacroix 75116 Paris

Quality Assurance Agency for Higher Education
Southgate House, Southgate Street, Gloucester, GL1 1UB

April 2021

© UNESCO 2021



Table of contents

List of figures	5
List of tables	5
List of abbreviations	6
Acknowledgements	8
Executive summary	9
Chapter 1. Introduction	12
Chapter 2. Overview of the national higher education system	16
2.1. The UK higher education sector	16
2.2. The social context	21
2.3. Governance and key steering instrument	24
2.4. Finance and funding	27
2.5. A flexible system?	28
2.6. Methodology for the UK case study	29
Chapter 3. National system-level approaches to support flexible learning pathways	31
3.1. National policy agendas and processes	32
3.2. Flexible learning pathways: Origins, routes, and destinations	38
3.3. Admissions and pathways to higher education	42
3.4. Access and recognition of prior learning	46
3.4.1. Entry routes into higher education	46
3.4.2. Further education	50
3.4.3. The Access to Higher Education Diploma	51
3.4.4. Open pathways to all	53
3.5. National policy issues	53
3.6. Articulation and credit transfer	55
3.6.1. Crossing educational boundaries	55
3.6.2. Crossing organizational and sector boundaries	56
3.7. Employer perspectives	59
3.8. Part-time learning	61
3.9. Finding the right pathways	64
Chapter 4. Flexible learning pathways in practice: Institutional perspectives	65
4.1. University of Birmingham	66
4.1.1. A traditional university with some diverse and innovative learning pathways	66
4.1.2. Organizational issues	67

4.1.3. Admissions: Pathways to Birmingham University	69
4.1.4. A flexible educational experience.....	71
4.1.5. Student perspectives on the LANS degree.....	74
4.1.6. Enablers and preventers	78
4.1.7. Managing flexible pathways	79
4.1.8. The innovation challenge.....	81
4.1.9. Conclusion	82
4.2. Exeter University	83
4.2.1. The Dean’s introduction	84
4.2.2 Academic partnerships.....	85
4.2.3 Accreditation of prior learning.....	85
4.2.4 Part-time study	86
4.2.5 Degree apprenticeships	87
4.2.6 Flexible Combined Honours	89
4.2.7 Liberal Arts	89
4.2.8 Q-Step	90
4.2.9 Online distance learning programmes	92
4.2.10. Some Exeter conclusions on the Impacts of FLPs.....	95
4.2.11 Messages from Birmingham and Exeter.....	96
4.3. Teesside University	98
4.3.1. Institutional context	98
4.3.2. The student.....	101
4.3.4. Admissions.....	103
4.3.4. Flexible pathways into the university	104
4.3.5. Flexible pathways through the university.....	106
4.3.6. Enablers and preventers of flexible offerings: What, when, where, and how?.....	107
4.3.7. Conclusion	107
4.4. The Open University and FutureLearn	108
4.4.1. Introduction.....	108
4.4.2 Part-time study provision meeting specific needs	109
4.4.3 E-learning through FutureLearn	110
4.4.4 E-learning through OpenLearn	112
4.4.5 MOOCs	114
4.4.6 Some conclusions on the Open University and FutureLearn.....	115
Chapter 5. Comparative analysis of institutional policies and practices for flexible learning pathways.....	117
Chapter 6. Some conclusions, recommendations, and questions.....	123
References	132
Annexes.....	139

List of figures

Figure 1. Overall degree structure in England	43
Figure 2. Difference between estimated offer made to students from high-participation neighbourhoods and average A-level scores of students from low-participation neighbourhoods (Q1–Q2 of the POLAR classification)	48
Figure 3. Programme structure of a History major at Birmingham University	73
Figure 4. Programme structure of a BSc in Natural Sciences at Birmingham University	73
Figure 5. A flexible learning pathway: Decisions for key stakeholders	129

List of tables

Table 1. Student numbers between 2014 and 2019 (postgraduates)	17
Table 2. Student numbers between 2014 and 2019 (undergraduates)	17
Table 3. HE student enrolments (all students) by personal characteristics: Comparison between 2014/15 and 2018/19	18
Table 4. Interviews at national higher education policy bodies	31
Table 5. Flexible learning subjects	41
Table 6. UK-domiciled leavers 2012/13 in full-time paid UK employment (excluding self-employed) by HE provider mission group and salary band, three years after completing their course.	60
Table 7. Student enrolments at four UK universities	65
Table 8. Interviews at the institutional level	66
Table 9. Student numbers at University of Exeter	83
Table 10. Student by level of study at Teesside University (2018/19)	101

List of abbreviations

ADHD	Attention Deficit Hyperactivity Disorder
AP	Alternative provider
APEL	Accreditation of prior experiential learning
APCL	Accreditation of prior certificated learning
AVA	Access Validation Agency
BAME	Black, Asian and minority ethnic
BBC	British Broadcasting Corporation
BSc	Bachelor of Science
BTEC	Business and Technology Education Certificate
CE	Chief executive
CIPD	Chartered Institute of Personnel and Development
CPD	Continuing professional development
DSA	Disabled Students' Allowance
DLHE	Destinations of Leavers from Higher Education
EU	European Union
FE	Further education
FEC	Further education college
FHC	Flexible Combined Honours
FLP	Flexible learning pathway
FTE	Full-time equivalent
GCE	General Certificate of Education
GCSE	General Certificate of Secondary Education
GVA	Gross Value Added
HE	Higher education
HEBCIS	Higher Education Business and Community Interaction Survey
HEE	Health Education England
HEFCE	Higher Education Funding Council for England
HEI	Higher education institution
HERA	Higher Education Research Act
HESA	Higher Education Statistics Agency
HND	Higher National Diploma
IELTS	International English Language Testing System
IFM	Institute for Media and Communication Policy
LANS	Liberal Arts and Natural Sciences (Birmingham University)
LHSTM	London School of Hygiene and Tropical Medicine
LLM	Master of Laws
LLE	Lifelong Loan Entitlement
LSE	London School of Economics

MIMA	Middlesbrough Institute of Modern Art
NATY	New Academic Teaching Year (Birmingham University)
NEET	Not in education, employment or training
OFS	Office for Students
OU	Open University
PGCE	Postgraduate Certificate of Education
PhD	Doctor of Philosophy
POLAR	Participation of Local Areas
QAA	Quality Assurance Agency
RPL	Recognition of prior learning
TEF	Teaching Excellence Framework
TUCP	Teesside University College Partnership
UCAS	University Central Admissions Scheme
UNESCO	United Nations Educational, Scientific and Cultural Organization

Acknowledgements

This report draws heavily on conversations with staff members from the main higher education policy bodies in the UK and from the universities that participated in the project. These were the UK Government's Department for Education, the Office for Students, the Quality Assurance Agency for Higher Education, Universities UK, the Institute for Employers and Students, the University of Birmingham, Teesside University, the University of Exeter, the Open University, and FutureLearn.

For reasons of confidentiality, the providers of the many quotations included in the text of the report are not named. However, we do want to recognize staff members who contributed in other ways, such as by helping to identify relevant documentation, arranging meetings with staff, and reviewing drafts of relevant parts of the documentation.

We wish to acknowledge the help provided in the above respects by:

- Greg Wade, Universities UK;
- Christopher Millward, Office for Students;
- Peter Myant, Department for Education;
- Julie Mizon, Quality Assurance Agency for Higher Education;
- Justin Cooke, FutureLearn;
- Paul Crawshaw, Teesside University;
- Kieran McGovern, University of Birmingham;
- staff members of Exeter University whose written contributions comprise the main content of the section devoted to flexible learning pathways at the university: Adele Dawson, Mike Finn, Rob Freathy, Peter Frier, Felicity Henderson, Lynda McGroggan, Hannah Murdoch, Matthew Newcombe, Jodie Potter, and Karen Walshe.

Essential support to the whole project was provided by Michaela Martin, Uliana Furiv, and Sophie Guillet at UNESCO's International Institute for Educational Planning (IIEP).

John Brennan

Executive summary

Flexible learning pathways in higher education provide routes to the acquisition of knowledge and skills at different life stages, to meet the different needs and circumstances of the learner. They can involve boundary crossing between different sources of knowledge, different subject fields, different institutional providers, and different forms of learning. Pathways can take learners on journeys through expanded and differentiated higher education systems and beyond. This report draws on the perspectives of national higher education bodies and a range of institutional providers of higher education to identify current policies and practices concerning flexible learning pathways in the United Kingdom of Great Britain and Northern Ireland (UK) higher education system, though with a main focus on the system in England.

The UK higher education system

The UK has a large and diverse higher education system with approaching 50 per cent of the population now attending higher education at some stage in their lives, and increasingly at several life stages. There are 131 universities, plus large numbers of alternative providers, though the student population is mainly concentrated in the universities. Almost 2.4 million students participate in higher education in the UK, split roughly between 1,800,000 undergraduates and 600,000 postgraduates. Nearly 2 million study full-time and over 500,000 study part-time. Nearly 500,000 are aged 30 or over.

Expansion, diversity, and competition have been central to UK Government policy debates about higher education in recent years. There are significant differences between the four devolved nations in their policies for higher education. Courses in England are now mainly funded from student fees, although students can receive government loans, to be repaid over a long period after graduation, once a minimum salary level has been achieved. Students are thus regarded as the main beneficiaries of higher education and are expected to pay for it.

There is a long tradition of institutional autonomy in the whole UK higher education system and, today, market demands tend to have a greater impact on institutions than government policies. Policy messages are often more about what is allowed rather than what is required. The recent rebranding of the national funding body for higher education in England, from the Higher Education Funding Council to the Office for Students, is a reflection of the move towards a more market-driven approach.

Flexible learning pathways: Policy perspectives

Flexible learning pathways are supported in principle but, generally, without specific policies to provide them. Credit transfer possibilities exist, but without an explicit national credit transfer policy. Many universities do have credit transfer arrangements with other institutions, but numbers of student transfers are quite limited, partly because of curriculum differences between institutions, and partly due to institutional competitiveness and worries about potential losses of fee income if students move away to a different institution.

Supportive statements from government and national higher education agencies address issues of social mobility, a more productive economy, greater competition and choice, and the need for students to be better informed about the diversity of learning pathways available. More explicitly, there are access and participation plans which support more part-time and mature students, accelerated degrees (two-year bachelor's degrees), and reviews of regulatory and funding arrangements for flexible provision. A recent national policy report (the *Post-18 Review*) predicted that learning pathways would need to move across organisational and sector boundaries. And the providers would have to allow greater flexibility and adaptability (Augar, 2019).

Flexibility in learning pathways can refer to the pace of study (full-time or part-time), entry routes, student transfers between courses and institutions, and delivery methods (online, work-based, as well as traditional face-to-face modes).

Flexible learning pathways: Institutional perspectives

Information for this report was collected from four very different universities, revealing considerable innovation and diversity in approaches to flexible learning pathways. There was evidence of flexibility in the access routes into university, in possibilities for combining courses from different disciplines, in accessing work experience, in having some study abroad, and in mixing full-time and part-time experiences. Movement between institutions was possible but not frequent. There were also differences in how much flexibility would be possible within different disciplines, with disciplines subject to professional body regulation generally exhibiting the least flexibility.

There were also differences in perspective concerning whether student priorities were for acquiring knowledge, skills, or qualifications, the learning experience, or the destination. Concerning qualifications, short courses leading to no qualification were often available, other courses provided credentials that could contribute towards the eventual acquisition of a qualification, while other courses led directly to a degree or diploma qualification. There was

considerable diversity between institutions and subject areas in terms of what was possible. Students had considerable choice in the range of pathways available to them and needed to be well-informed to choose between them.

Flexible learning: Multiple perspectives

Flexible learning pathways pose questions about the relationship between higher education institutions and other organizations, for learners making choices, regarding which pathways to follow and how to gain recognition for learning undertaken in different settings. For individual higher education institutions, there are tensions between collaboration and competition in their relationships with other institutions, the need to achieve recognition for the distinctiveness of what they offer, and in achieving a good match between what they are providing and what their learners are seeking. External and internal institutional quality assurance systems have the potential to inform students, providers, and funders about flexible learning pathways, both in terms of the journey and the destination.

Conclusions and recommendations

The diversity of the UK higher education system provides potential students with a lot of choice about what, where, when, and how to study. And the diversity of the student population requires diversity in what is offered. But achieving a good match between the two diversities remains a big challenge. This project found a lot of innovative developments taking place in several universities – blended learning combining face-to-face learning with online learning, full-time and part-time learning, cross-disciplinary learning, work-based learning, and international experiences – but movements across institutional boundaries appear to be limited for UK flexible learning pathways, and this can limit the options available to students. Recommendations from the study include: more attention to be given to the certification of learning from different sources; providing financial support for students of all ages; greater collaboration between institutions, within and beyond the higher education sector; better support for lifelong learning and part-time learning, in particular; and addressing social equity issues across the UK's diversified higher education system.

A major conclusion is that the UK's higher education system provides students and potential students with a lot of flexible learning pathways but that many potential pathways are blocked by regulatory controls and insufficient collaboration between higher education providers. And there are differences between the four nations. Furthermore, students need to have more

information about the learning pathways and destinations available to them if they are to make informed choices about their lifetime learning journey.

Chapter 1. Introduction

This report forms part of an international project, led by UNESCO's International Institute for Educational Planning (IIEP), on higher education's role in supporting 'flexible learning pathways'. These are defined by UNESCO as:

Entry points and re-entry points at all ages and all educational levels, strengthened links between formal and non-formal structures, and recognition, validation and accreditation of the knowledge, skills and competencies acquired through non-formal and informal education. (UNESCO, 2016: 33)

The project is an attempt to examine the processes for getting *into*, getting *through*, and getting *out* of higher education at different life stages, and the effects on the students and the societies of which they are part.

Higher education systems differ, in their size, structures, priorities, histories, and much else, and the national case studies are an attempt to examine the extent of the convergence and the effects of changing global challenges to higher education systems and their institutions in meeting developing societal needs for flexible learning pathways.

UK higher education was selected as a case study because it has expanded and diversified substantially in recent decades and has undergone considerable changes in respect of funding and regulatory arrangements, though also retaining much of the tradition of institutional autonomy that has characterized the UK system for most of its existence. It is undergoing considerable change at the present time, with new providers entering the competitive marketplace which, today, is a key feature of the UK higher education system.

The UK has a large and diverse higher education system. In fact, it has four higher education systems, one for each of the UK's constituent nations of England, Scotland, Wales, and Northern Ireland. It was beyond the scope of this study to examine in detail each of the national higher education systems and the national contexts of which they were part. However, while much of the study is focused on the system in England, many of the issues raised are relevant to the UK as a whole.

Learning pathways can take the learner to different subjects and different institutions, at different life stages. Along the pathways, there are likely to be economic, social, cultural,

political, and domestic aspects to the experience. Each pathway has a starting point and a destination, although the actual destination might be different from the one originally intended.

As in most countries, for many years the learning journey in UK higher education generally commenced immediately after leaving school and was embarked on by a relatively small number of learners who had attained good results at good schools, and tended to come from relatively affluent social backgrounds. The journey in the UK typically took three or four years and the destination was usually a good, well-paid job. And the learning pathway typically followed a single subject within a single higher education institution.

However, in today's expanded higher education systems, there are many different learning pathways being followed by many different kinds of learners, coming from different starting points and heading towards different destinations. And learners may follow several different pathways during their lives. They may change pathways, crossing traditional boundaries of subjects, institutions, and, indeed, nations. The learning journey may be about acquiring new knowledge and new skills in order to perform new jobs, or about updating knowledge and skills to perform existing jobs better, or about acquiring new qualifications in order to compete successfully in increasingly competitive labour markets. But learning journeys are not just about acquiring knowledge and skills for jobs. They affect social and political attitudes, they produce both geographical and social mobility, they foster new relationships and interactions. They shape and change identities. As final-year students have been heard to remark, 'I am a different person from the one who came to this university three years ago' (Brennan *et al.*, 2010: 147).

In today's UK higher education, students enter higher education from many different social, educational and ethnic backgrounds, at different ages, and, in the case of the large numbers of international students, different countries, all with different needs and aspirations. They are faced with a wide choice of institutions, courses, and study modes, and they must pay for them, at least in universities in England. Student loans are available and taken by nearly all students, to be repaid in their years of (hopefully) well-paid graduate employment. Differences in the origins, experiences, and destinations of UK students make the idea of flexible learning pathways highly relevant. Different students need different things; higher education must provide different things, but there needs to be a good match between what is needed and what is provided for different students.

The diversity of UK higher education has many dimensions, reflecting history, geography, institutional reputation, but, in particular, the traditions of institutional autonomy which have

always been central to the UK's higher education culture. As is indicated in the next section of this report, several participants in UK higher education who were interviewed for this project expressed doubts about whether there was a 'system', because institutions still had considerable freedom over what they did and how they did it. Insofar as those freedoms were declining to some extent, it was arguably more to do with market effects than government policy effects. Students had become 'consumers' in the UK higher education world and the institutions had to deliver what their customers wanted. Flexible learning pathways were an important part of the student customer's purchase.

In 2019, there were more than 2 million students at UK universities, nearly 1,800,000 taking undergraduate courses, and nearly 600,000 taking postgraduate courses (see *Annex 1*). There were slightly more women than men. And while 972,280 students were 20 years old or younger, as many as 469,985 students were 30 years or older. And while nearly 2 million learners in higher education were full-time students, over half a million were part-time students, combining their learning with paid work and domestic responsibilities. All of them would also be learning from experiences beyond the boundaries of their education pathways.

So, what are all these people learning while travelling on their learning pathways? How is it changing their lives? How is it changing the people around them? How is it changing the societies to which they belong? These are big questions. Some of the answers may come from larger concepts of knowledge societies and knowledge economies, which may be creating the need for the pathways. But they do not necessarily tell us about the effects of the pathways. The UNESCO project, to which this UK report contributes, is an important step in providing knowledge about the effects of flexible learning pathways in, and beyond, higher education. The UK is at the point where over half the population will have experienced higher education at one stage in their lives, and many will have experienced it at several stages. What and how are they learning? There may be many different answers to these questions.

The project has examined higher education's contributions to the provision of flexible learning pathways from a number of perspectives, in particular the national policies and the views of the bodies responsible for their implementation, and then the policies and activities of higher education institutions and the different stakeholders within them. Information was gathered from the available literature, from interviews with representatives of national higher education bodies and senior members of universities, and from national datasets of higher education students. The project examined degree structures, admissions at different degree levels, and the flexible entry pathways that were available. Different modalities of learning – full-time and

part-time, online, distance, work-based – are linked to the flexible learning pathways. The strong tradition of institutional autonomy within the UK system allows a considerable diversity in what is provided educationally. The diversity of provision also links to the diversity of students with a range of social equity factors, such as class, ethnicity, age, and gender, linking to the diversity of the system.

The rest of the report is structured as follows:

- An overview of the UK national higher education system and its diversity and differentiation.
- System-level approaches for supporting flexible learning pathways, and the values and aims that inform them.
- Flexible learning pathways in practice, with case studies from two universities, Birmingham University and Teesside University, plus overviews of developments at two other universities, Exeter University and the Open University, along with national student data from all institutions.
- Conclusions and recommendations for policies and practices for flexible learning pathways in higher education.

Chapter 2. Overview of the national higher education system

This chapter will provide the context for the study of flexible learning pathways in UK higher education: the students, their courses, and the institutions providing them. The UK's four nations – England, Scotland, Wales, and Northern Ireland – have their own distinctive education systems. It will not be possible in this report to present the details of the differences between the four higher education systems. The focus will be on the largest system, England, although some of the features will also be applicable to the UK as a whole.

The first sub-section will provide a description of the sector, its policies, providers, and users. Data provided on students is from the national Higher Education Statistics Authority (HESA) and additional HESA data is available in Annex 1. There follows a sub-section on the social context, including the economic and political factors that help shape the social and cultural background to higher education's development in the UK. Governance and key steering entities are reviewed, followed by finance and funding, in relation to the organizational priorities they set for higher education. The section ends with a consideration of the questions raised for flexible learning pathways (FLPs) in UK higher education and an outline of the methodology used for the UK FLP study.

2.1. The UK higher education sector

The UK has reached the 'universal' phase of higher education system development famously described by Martin Trow as occurring when over 50 per cent of a nation's population are entering higher education with the 'adaptation of the whole population to rapid social and technological change' (Trow, in Burrage, 2010). For students, universal higher education brings 'much postponement of entry, softening of boundaries between formal education and other aspects of life, term-time working' (Trow, in Burrage, 2010), to which, today, should be added online and distance learning.

In 2018/19, there were nearly 2.4 million students studying at UK higher education institutions. The breakdown was as follows (HESA, 2020a):

- Undergraduate: 1.7 million,
- Postgraduate: 0.6 million,
- Full-time: 1.84 million,
- Part-time: 0.5 million,

- Students from the UK: 1.88 million,
- Students from the EU: 0.14 million,
- Students from non-EU countries: 0.32 million.

The data are from the 164 public higher education institutions in the UK which returned data to HESA, plus the private University of Buckingham. However, in addition to these figures, there are significant numbers of students on higher education courses at other post-school educational institutions, generally known as further education colleges or ‘alternative providers’ (see Annex 1).

Table 1 and Table 2 show student numbers by course type at postgraduate and undergraduate levels. Overall, there have been steady increases in numbers between 2014/15 and 2018/19, though at undergraduate level there has been a decline in the numbers on sub-degree level courses.

Table 1. Student numbers between 2014 and 2019 (postgraduates)

	2014/15	2015/16	2016/17	2017/18	2018/19
Research	98,555	98,565	100,085	100,275	106,885
Taught	425,270	418,090	439,075	454,990	472,915
All PGs	538,175	531,225	551,595	566,585	585,730

Source: Adapted from Higher Education Statistics Agency, Higher Education Student Statistics: UK, 2018/19 (HESA, 2020a)

Table 2. Student numbers between 2014 and 2019 (undergraduates)

	2014/15	2015/16	2016/17	2017/18	2018/19
1 st degree	1,524,235	1,564,105	1,597,825	1,621,725	1,682,675
Foundation	48,005	39,965	36,975	33,975	32,385
HND/C*	15,850	15,820	15,150	14,270	12,975
PGCE**	2,385	2,030	1,730	1,440	1,180
Other***	139,360	126,270	114,600	105,130	99,445
Total other****	203,570	184,090	168,460	154,815	145,560
All UGs	1,727,805	1,748,195	1,766,255	1,776,540	1,798,240

*Higher Education Certificate/Diploma

**Postgraduate Certificate of Education

*** ‘Other’ includes any qualification not listed above

**** ‘Total other’ includes all undergraduate qualifications excluding first degrees

Source: Adapted from Higher Education Statistics Agency, Higher Education Student Statistics: UK, 2018/19 (HESA, 2020a)

The gender, age and ethnic distribution of UK students is summarized in Table 3. Enrolments have been increasing significantly overall although there have been small reductions in the numbers of students aged 30 or over and ethnic white students, but the overall numbers in both

groups remain very large. The biggest increases have occurred among female students, students under the age of 24, and Asian students.

Table 3. HE student enrolments (all students) by personal characteristics: Comparison between 2014/15 and 2018/19

	2014/15	2018/19	+ or -
<i>Sex</i>			
Female	1,273,255	1,362,365	+89,110
Male	992,350	1,019,045	+26,695
<i>Age</i>			
20–	903,475	972,280	+68,805
21–24	604,705	678,210	+73,505
25–29	260,375	263,280	+2,905
30+	497,100	469,985	-27,115
<i>Ethnicity</i>			
White	1,418,585	1,415,105	-3,480
Black	117,465	137,185	+19,720
Asian	175,235	209,705	+34,470
Mixed/Other	84,520	104,980	+20,460
Total UK based	1,829,090	1,898,205	+69,112
Total (All)	2,265,980	2,383,970	+117,990

Source: Adapted from Higher Education Statistics Agency, Higher Education Student Statistics: UK, 2018/19 (HESA 2020a)

Institutional provision has been expanding and diversifying. A total of 131 higher education institutions are universities, although a large number of these had long histories as colleges or polytechnics before achieving university status. A binary system of universities and polytechnics was abolished in 1992 and the polytechnics converted into universities. However, since 2000, a further 49 universities have been created, all of which had histories as other kinds of post-school institution.

The expansion of UK higher education relates well to Martin Trow's model (1974) of the transition from elite to mass to universal higher education systems and the changing social, economic and political factors which accompany that transition. These include a changing balance between academic, institutional, government, and consumer/society power and authority. The consumer/society dimensions have also changed as members of society now commence their learning journeys from a much wider range of origins than was the case in the days of the smaller, elite system. And the destinations themselves have changed, not only as a result of the expansion of higher education but also in response to changing labour market needs and opportunities. There has been tension about the idea of a 'graduate job' in recent years within the UK as a much wider and diverse range of occupations are entered by graduates. And as jobs continue to change and evolve, emphasis shifts to lifelong learning, with people entering and re-entering higher education several times in their lives, often studying part-time, or in a

workplace context, or using online learning technologies. For graduates of the smaller, more elite forms of higher education, questions arise as to whether or not some of the new forms should be considered genuinely ‘higher’. A recent UK Government-sponsored report on the future development of the sector used the term ‘post-18 education’ to refer to the diverse forms of learning that would be needed in the future (Department for Education, 2019a). The conclusions and recommendations of the post-18 report will be reviewed in a later section of this report.

UK higher education is quite steeply stratified, with strong ‘vertical differentiation’, to use Burton Clark’s terminology (1983). There are rankings and league tables of institutions which partly reflect research ratings but there is also a strong element of age-related prestige. Thus, in England, the ancient universities of Oxford and Cambridge carry the most prestige, followed by nineteenth-century ‘civic’ universities such as Manchester, Birmingham and Bristol. Most of the institutions which form part of the University of London also sit within the ‘elite’. A collection of ‘new universities’ was created in the 1960s, along with the Open University, which offers distance education to everyone everywhere in the UK. Then there are the universities that were formerly polytechnics or colleges. Most UK universities began their institutional lives as educational institutions that were not universities.

Alongside the vertical hierarchies, there are several university ‘mission groups’ for universities that share broadly similar features and aspirations. The main groups are the Russell Group, Million+, and the Alliance Group. The Russell Group is the most prestigious and consists of 24 well-established, research-focused universities. Most of them have strong international reputations and are well-connected to political and economic elites. They are the universities of choice for ambitious students with good qualifications, generally from quite affluent social backgrounds. Many Russell Group graduates will go on to occupy elite social, economic, and political positions in UK society.

Members of the Million+ group are mainly former polytechnics or other ‘new’ universities. They tend to give greater priority to teaching than do most Russell Group universities and often have a more regional or local focus. The Alliance Group members tend to be more ‘business engaged’, often with a city or regional focus in both their teaching and research. However, there is a diversity of institutions within the memberships of all three groups and these partly reflect the contexts of their members’ geographical locations and institutional histories.

The three mission groups comprise 63 institutions, which leaves a majority of universities unattached to any group. In addition, there are a further 34 institutions classified as ‘higher

education providers', many of which are located in or around London and often specialize in business and management fields. There are also specialist institutions in fields such as art and design, medicine, and engineering.

To all of this must be added the work of 732 'alternative providers' of higher education, often colleges focused on other educational levels, many with less than 100 higher-level students, although together providing higher education to around 300,000 students (Department for Business, Innovation and Skills, 2016b). Additionally, in 2017, there were 241 further education colleges (FECs) offering higher education courses in England, with 208 receiving funding from the Higher Education Funding Council for England (HEFCE). A further education college is defined as a provider of study after secondary education that is not undertaken as part of an undergraduate or graduate degree (Collins Dictionary, n.d.), although, in practice, around 10 per cent of higher education is actually located in such colleges.

The numbers of students at the different types of institution ('higher', 'further', and 'alternative') providing higher education at different levels ('postgraduate', 'undergraduate', and 'other') are given in Annex 1. The expansion in student numbers on undergraduate courses appears to be at the expense of a decline in the numbers of students on 'other' courses, mainly sub-degree certificates and diplomas.

There is, thus, a very substantial diversity of higher education provision within the UK. While many of the alternative providers are 'private' institutions, either 'for profit' or 'not for profit', most of the other higher education institutions are 'public', under the direct authority of national and, in some cases, local government. While, historically, higher education institutions in the UK have enjoyed considerable autonomy, especially at the elite end of the system, more recently, the external influence of government has been increasing, with a growing set of external control and regulatory requirements. At the same time, public funding from government sources has been in decline with students in England having to pay fees for their higher education courses. Thus, the public/private distinction has become increasingly blurred. Students have become consumers as well as learners, and higher education has become a competitive marketplace.

A recent report by a House of Commons committee (House of Commons Committee on Exiting the European Union, 2018) set out the key characteristics of the UK higher education sector. Its main focus was on the funding, regulation, size, and type of institutions. The main conclusions included:

The HE sector has some of the characteristics of a competitive market in that there are a large number of providers on the supply side and a large student base on the demand side. Providers may compete with each other on the basis of quantitative and qualitative factors such as price, course content, outcomes and the quality and availability of wider facilities, with each provider's offer slightly differentiated and therefore not perfect substitutes (House of Commons Committee on Exiting the European Union, 2018, p. 3).

The Higher Education and Research Act (HERA) received Royal Assent in April 2017. HERA and the new regulatory framework in England, which will be operated by the new Office for Students, aims to enhance competition with a single gateway to enter the sector and a risk-based regulatory system. This seeks to remove barriers for high quality providers entering the HE market and create a level playing field for all such providers, regardless of how or when they entered the HE system. The aim of competition is to benefit students, in the form of better value, more innovation and greater choice (p.3).

2015/16 HESA data shows that HEIs in the UK have on average 2,958 employees. The smallest number of employees at a single HEI was 18. Analysis of the Further Education workforce data in England report shows that the average college in England has 383 full-time equivalent staff. According to a Business Innovation and Skills survey of alternative providers (APs) in the UK, 75% of all APs employed ten or fewer FTE staff (p.4).

The Alternative Provider (AP) sector has grown rapidly in recent years. From 2011/12 to 2015/6, the number of full-time students at APs receiving student support increased from 12,000 to 34,000 (p.4).

Expansion, diversity, and competition have been at the heart of UK government debate and developments in the higher education sector in recent years. Higher education is increasingly viewed by government as a marketplace and higher education institutions as businesses. Students are the customers. However, from wider social perspectives, the expansion of higher education to 'mass' and 'universal' forms has larger consequences, for both providers and users. Some of these are considered in the next section.

2.2. The social context

As in most developed economies, higher education in the UK has expanded dramatically to meet changing labour market needs. Governments have invested in higher education as an important contributor to economic development. And an awareness that 'getting a good job' is increasingly likely to require possession of a relevant higher education qualification causes

increasing demand for higher education, both from students completing their school years and from adults at different life stages needing to change or improve their job prospects. Thus, changing economic and social needs have created both the demand for and the supply of ‘mass’ and ‘universal’ higher education (in Trow’s terms).

National data on the employment of graduates are collected annually through the Destinations of Leavers from Higher Education (DLHE) survey. Of graduates completing their courses in 2017, 91% of survey respondents were in work or further study (HESA, 2019). Graduates of all age groups had higher average salaries and lower unemployment rates than non-graduates. In 2017, the average salary was £33,000 for a graduate and £39,000 for a postgraduate, while, for a non-graduate, it was £23,000. Thus, notwithstanding the very considerable increase in the numbers of students graduating over recent decades, the economic benefits of higher education remained substantial. Besides, pursuing a postgraduate degree not only offers the opportunity of a higher salary, but it also enables students to get a higher-quality job. Indeed, postgraduates are slightly more likely to ‘find their current working activity meaningful’ (90% of them ‘agree’ or ‘strongly agree’ with the statement) than undergraduates (84%). The skills postgraduates gain with a few additional years of study also seem to be more in line with the job they do (78% of postgraduates ‘agree’ or ‘strongly agree’ with the statement that they use what they learned during their studies in their current activity, compared to 68% of undergraduates – see Annex 2).

Yet, despite the increasing opportunities arising from a changing economy, social inequalities associated with advantages in background and birth remain strong in the UK and its education system contributes to their maintenance and reproduction. Indeed, the more deprived a child’s background, the less likely they are to attend a Russell Group university – only 5 per cent of students eligible for free school meals at age 11 entered such a university, compared to 11 per cent of students who were not (Department for Education, 2015). And these inequalities are reproduced and magnified from one generation to the next since people with parents who are doctors are 24 times more likely to become doctors than those whose parents had any other type of work. The same applies to children with parents in the law sector who were 17 times more likely to work in it than children from other family backgrounds (Friedman and Laurison, 2019). Hence, social reproduction is nurtured by the British education system. The ‘vertical stratification’ of higher education, as described by Burton Clark, maps onto, and arguably supports, the vertical stratification of British society. In a major study of British *Social class in the 21st Century*, sociologist Michael Savage writes:

What we are therefore witnessing here is a process of mutual reinforcement of advantage which takes place in the upper levels of the social hierarchy. The more lucrative the occupation, the more likely it is to be composed of people from advantaged backgrounds. And the best paid members of these occupations tend to also be disproportionately drawn from the most privileged backgrounds. (Savage, 2015: 201)

Savage devotes a chapter of his book on social class to the role that UK universities play in reinforcing and reproducing the class system. He comments:

Going to university matters a great deal for entering the elite, but it is not the only ticket to elite entry, and certainly not the Golden Ticket. It matters too *which* specific university is attended and *where*: the destinations of graduates from different ‘types’ of university vary widely and there are some striking – and in some cases surprising – outcomes for graduates of particular institutions. We will argue that intense educational competition reinforces a strong pecking order between institutions, in which it is the elite institutions which play a vital role in permitting access to the most advantaged positions. (Savage, 2015: 221)

Savage and other researchers have demonstrated how UK higher education provides pathways for students from elite backgrounds to enter elite universities and move on to elite positions in society after graduation. And a recent report from the Higher Education Policy Institute (Eliot Major and Banerjee, 2019) confirms that graduates from elite universities dominate the country’s most influential positions and that privileged students make up most of the intake at these universities. The report draws on data from a Sutton Trust report that found that graduates from elite Russell Group universities make up 49% of people in elite social positions and that 61% of students from independent schools progress to highly selective elite universities compared with 21% from state schools and colleges (Sutton Trust and Social Mobility Commission, 2019). Thus, a process of elite reproduction remains at the heart of the UK education system,

But the benefits of higher education are not limited to members of social elites. Higher education in the UK remains an important route to upward social mobility for British people. The destinations of learning pathways provided by British higher education vary depending on social background, but they do nevertheless provide social advantages lacking for those who have not travelled along any of higher education’s pathway.

Nevertheless, some groups remain marginalized and are not in education, employment, or training (NEET), as reflected in Parliamentary discussions in 2018. From January to March

2020, there were 771,000 NEETs aged 16 to 24 years – an increase of 6,000 compared to the same period of the previous year (Office for National Statistics, 2020). This is particularly troublesome because unemployment early in life has lasting effects on an individual’s mental and physical health as well as on their prospects of employment and their wages. A report from the Department for Education (2018, Annex 3) shows that 18 per cent of students with special educational needs were NEET for the year 2013/14, as were 27 per cent of those who were taught by a pupil referral unit providing education for children who are not able to attend school because they have been excluded, suffer from illness or are a new starter waiting for a place in a mainstream school. Moreover, 37 per cent of looked-after children – those in the care of the local authority for more than 24 hours because of disability or inadequate parenting – were NEET in 2013/14 (see Annex 3). This shows that students suffering from illness, impairment, or from a lack of parental involvement were more prone to drop out of school and higher education institutions and to become NEET. In 2018, the House of Commons published a report summarising existing policies which aim to reduce the number of people who are NEET. Among these policies, apprenticeships and traineeships are seen as ways to get NEETs back on track and to ensure that they gain specific skills to enhance their chances of finding employment. Besides, ‘second chance’ further education provision is offered to 19–23-year-olds who can train for free to attain their first level of education (GCSE or A-level equivalent). This could be the first step towards higher education.

The messages for flexible learning pathways from these analyses are that different pathways lead to different destinations for different learners. Some pathways have existed for a very long time but have only been available for a few: mainly those from elite backgrounds on pathways heading toward elite futures. However, the expansion of the higher education system during the second half of the twentieth century brought with it much greater diversity, in terms both of what is provided and who is experiencing it. The creation of the Open University provided learning pathways in principle for everyone, though destinations differ according to a wide set of individual, social, and geographical circumstances. The needs and aspirations of learners and potential learners differ according to a wide range of factors, including age, gender, race, and geography, which combine with social class to shape values and decisions about which pathways to follow, as well as when and how to follow them.

2.3. Governance and key steering instrument

In considering governance at the national level, it is important to recognize the existence of the four nations which comprise the United Kingdom of Great Britain and Northern Ireland. The

UK ceased to be a unitary state in 1998 and many functions, including for higher education and research, were devolved to the constituent nations (England, Scotland, Wales, and Northern Ireland). However, some higher education functions remained at the UK level, including quality assurance and research assessment. Across the whole system, new public management principles designed to increase accountability, efficiency, and value for money were increasingly emphasized, alongside management mechanisms which stressed objectives, performance measurement, and competition.

Decisions are made at many levels within UK higher education and their impacts on practice are, consequently, not always clear. Government strategies may be modified by the responsible national bodies (for funding, quality, etc.), then modified further at institutional and faculty/departmental levels, and at the level of individual academic staff. Traditions of institutional autonomy and individual academic freedom may have been modified over recent decades, but they have not disappeared from higher education. The curriculum, recruitment of staff and selection of students are all matters on which institutions continue to exercise autonomy. A senior staff member at the Quality Assurance Agency observed:

A more diverse system with considerable institutional autonomy and independence from government control is part of current government strategies which are intended to use market mechanisms to develop and provide diverse tertiary education to meet diverse economic and social needs. A resulting mix of institutions can help with providing flexibility. (Quality Assurance Agency, staff member, in-person interview)

Autonomy has, however, been modified by a growth in consumerism concerning services to students, measured by an annual National Student Satisfaction Survey through which students obtain an influential voice, as consumers as much as learners.

This is also reflected in the shift from government funding to student fees in the financing of higher education in England, which has led to the replacement of the Higher Education Funding Council for England (HEFCE) by the Office for Students (OfS). The staffing and location of the organization remain much the same but the functions and culture of the OfS are more focused on representing the interests of students whereas HEFCE was much more a representative body acting for the institutions themselves.

Another important change is the location of responsibility for funding and regulation of research in institutions separate to those responsible for teaching. This separation also reflects the responsibilities of different government departments, with the Department for Education

having responsibility for the educational functions of the sector and the Department for Business, Energy and Industrial Strategy having responsibility for research-related functions.

The major responsibilities of the Office for Students are:

- Duties to establish, administer, and maintain a comprehensive register of English higher education providers and to take responsibility for registration and de-regulation decisions.
- Responsibility for granting institutions degree-awarding powers and university titles.
- Responsibility for access and widening-participation policies, and approval of the mandatory access and participation plans of provider institutions, as part of an overall duty to promote equality of opportunity for all students.
- Power to operate a new teaching excellence framework.

Some aspects of these powers are devolved to the Quality Assurance Agency for Higher Education (QAA) which has responsibility for the national qualifications framework as well as for providing institutional reviews of quality assurance.

At institutional level, governance procedures have changed quite radically, with powers moving from academic staff to governing bodies. There had been different traditions in the pre-92 universities compared to those of the former polytechnics. In the latter, when they became corporate organizations in 1988, full powers over institutional strategies were invested in the governing bodies with the university vice-chancellor acting as ‘chief executive’ in advising on and implementing those strategies. The authority of all governing bodies was defined in 2016 by the Higher Education Funding Council for England (HEFCE) as having ‘ultimate responsibility that cannot be delegated for overseeing the HEI’s activities, to determine its future direction, and to foster an environment in which the HEI’s mission is achieved’ (HEFCE, 2016).

These changes are often regarded as having created a culture of ‘managerialism’ within higher education institutions, with authority shifting from the academic profession within the institution to the external stakeholders on the governing body and with institutional leadership changing from an internally focused collegiality to an externally focused managerialism. However, there is considerable variation between institutions in how current governance and policy frameworks are implemented.

Concerning the implications for flexible learning pathways, a representative of Universities UK commented:

We have a flexible system but with a number of break points or decision points, the main ones being the barriers which result from the autonomy of institutions about who and who not to admit, and what and how to teach them. But all of these factors can be overcome if decisions line up and the curriculum is organized to permit flexibility. But you have to make choices. (Universities UK representative, in-person interview)

The choices to be made by individual institutions cannot ignore the directions of government policy but, to an even greater extent, they have to respond to the choices being made by their student customers.

2.4. Finance and funding

The major sources of funding for higher education providers in the UK are tuition fees and education contracts. In 2017/18, just under half of a total income of £38.2 billion came from these sources (£18.9 billion). Funding body grants represented £5.1 billion and research grants and contracts £6.2 billion. Investment income contributed £0.2 billion, donations and endowments £0.6 billion and other income £7.2 billion. Income from research represented around a fifth of the total and endowments and investments 2.4 per cent (HESA, 2019).

A report from Universities UK for the previous year showed total teaching income for UK higher education to be £20 billion, with 60.6 per cent of the funding coming from home and EU student fees, and a further 23.4 per cent coming from non-EU student fees (Universities UK, 2018c). Thus, learning pathways for international students are an important contributor to the financial health of higher education institutions in the UK.

Under the UK government elected in 2019, the main beneficiaries of higher education are considered to be the students themselves who are expected to obtain successful and well-paid careers. A national student loan system is in operation in England and students are only required to repay their loans when they are receiving a good salary and then over a long period. However, the funding system has different implications for different students, with older part-time students generally most affected by the loan repayment requirements. As the Universities UK representative remarked:

The current challenge for lifelong learning is whether it's the individual or the employer or both who is financially supporting it. But increasingly people may need to change

their qualifications because they need to reskill and take different career paths.
(Universities UK representative, in-person interview)

The system of student loans currently only operates in the English system with institutions within the other UK nations receiving more government funding.

Tuition fees for English undergraduate students are currently capped at £9,000, with loan repayments only required after graduation, once graduates have achieved incomes above a certain level. However, at the time of writing this report, the UK Government announced the introduction of a Lifelong Loan Entitlement (LLE) to four years of post-18 education to replace the current student loans arrangements (Government UK, 2020). Details of the LLE have not yet been provided but it seems to be an ambitious instrument to enable working adults to enter and re-enter higher education at different life stages in order to upskill or reskill. This contributes to overhauling the traditional vision of the students embarking on a three- or four-year bachelor's degree immediately after leaving school and brings more flexibility to the higher education system.

2.5. A flexible system?

Several of the national policy-makers interviewed for the project questioned whether there really was a higher education 'system' in the UK at all. Much was left to individual institutions to determine, reflecting their distinctive missions and the needs and aspirations of the students they recruited. The flexibilities allowed institutions to limit the flexibilities available to potential users of higher education. The representative of Universities UK remarked that:

We have a flexible system, but it has its problems. Flexibility is prevented by the priorities of individual institutions. This all links to institutional autonomy and the challenges that come from attempting transfers between different curricula.
(Universities UK representative, in-person interview)

While it may be the case that higher education institutions in the UK are subject to less detailed external regulatory controls than institutions in some other systems, there is still a regulatory system with requirements regarding quality, equity, and funding. However, it is also the case that the market's requirements are intended to replace national government requirements in many respects. The higher education marketplace is more open to the arrival of new providers than it is in many other countries, and more so than it has been in the UK historically. It is also potentially open to the disappearance of some existing providers. The needs and decisions of students and potential students are emphasized. Accelerated bachelor's degrees (two years full-

time), credit transfers between institutions, online teaching and learning and many other innovations are allowed but not required. Institutions are allowed to expand their student enrolments at the expense of other institutions. Market competition is admired, even if it is often at the expense of collaboration and partnerships between institutions. The student is now the ‘customer’ as well as the learner, and higher education must meet customer requirements, though these may not always be the same as the requirements of wider society.

On the implementation of policies, a staff member of the Office for Students referred to:

A culture of competitiveness between institutions which itself can be driven by government rewards and recognition to institutions. The culture of competitiveness needs to be challenged and a greater recognition of the need for a division of labour between different institutions. (Office for Students, staff member, in-person interview)

Greater flexibility in learning pathways through higher education requires more collaboration between institutions, especially if pathways are to cross institutional boundaries. Institutional competitiveness and uncertainty about future policy directions could be a limiting factor in achieving flexibility.

2.6. Methodology for the UK case study

The UK case study is based on an analysis of recent literature on national developments relevant to flexible learning pathways, interviews with representatives of relevant national higher education bodies, and interviews with senior academic staff at two contrasting universities. Information was also obtained from two additional universities and from an international company providing online learning opportunities. There was a mix of individual and group interviews, reflecting organizational preferences and availability of interviewees. All interviews were recorded and most transcribed. Efforts were also made to obtain some student perspectives, but with only limited success, due to the arrival of COVID-19 and the effective closure of institutions.

Some of the relevant literature was referenced in the opening chapter on the UK higher education system, especially the Augar *Post-18 Education Review*, and this will be referred to again below. Additionally, recent publications from Universities UK, the universities’ national body, will be drawn on. Many of these directly address issues of flexible learning and routes to high-level skills and present perspectives and policies of higher education institutions.

At national level, interviews were conducted with relevant senior staff of the government’s Department for Education, the Office for Students, the national Quality Assurance Agency,

Universities UK, and the Institute for Students and Employers. For the institutional case studies at the University of Birmingham and Teesside University, interviews took place with members of the institutional leadership teams, staff responsible for quality assurance and student support, plus senior academic staff in faculties and departments. Additional information was also obtained from Exeter University and the Open University, and from the latter's FutureLearn company, which provides online learning in partnership with over 80 universities across the world.

As indicated above, the project was not able to contact many students at the case study universities. This will be examined in Chapter 4. But before focusing on students' experience of FLPs at the institutional level, this report analyses national approaches supporting flexibility in higher and further education. National and institutional student data from the Higher Education Statistics Agency (HESA) are referred to in the following chapter and analysed alongside several interviews. Additional HESA statistics are presented in Annex 1 of the report.

Chapter 3. National system-level approaches to support flexible learning pathways

We have already observed that UK higher education has experienced considerable change in recent years. In this chapter, we consider the consequences for flexible learning pathways. National system-level approaches to flexible learning pathways need to take account of the needs and aspirations of learners, the capacity and priorities of institutional providers, and the policies and supports provided by national organizations. And there can be different messages and needs according to these different perspectives. This chapter focuses on the perspectives of national higher education organizations.

Interviews were carried out with senior policy staff at the relevant national bodies with responsibilities for the higher education sector. Details are provided in the table below:

Table 4. Interviews at national higher education policy bodies

Organisation	Topics	Interviewees
Govt Dept for Education	Access, quality, flexible learning, diversity	2 on HE strategy 1 on widening participation
Office for Students	Access, equity, flexible learning pathways	2 (including research perspectives)
Quality Assurance Agency	Quality reviews, Access, National Qualifications Framework, Credit transfer	3 on quality & access 1 on qualifications framework 1 on credit transfer
Universities UK	Diversity and relationships between institutions, university perspectives	1 on institutional perspectives on flexible learning
Institute for Students & Employers	Employer expectations, student work experience, skill requirements	1 on employer perspectives & experiences.

Source: Elaboration by the author.

Below, relevant national policies and processes are reviewed and the origins, routes and destinations of the available pathways. The chapter then considers how flexible learning pathways can be accessed and the extent to which current policies appear to enable or prevent, encourage or discourage entry to these pathways. Finally, it considers the extent to which it is possible for learners to change pathways, how travel along the pathways can be combined with other responsibilities (employment or domestic), and the destinations to be reached at the end of the pathways.

First, however, relevant current government policy initiatives for higher education are summarized.

3.1. National policy agendas and processes

Current national policies on higher education derive from the UK Government's Higher Education and Research Bill¹ published in 2017 (Department for Business, Innovation and Skills, 2016a). The aims of the bill were as follows:

The Higher Education and Research Bill will support the Government's mission to boost social mobility, life chances and opportunity for all, and enhance the competitiveness and productivity of our economy. (ibid.: 1)

The Bill will deliver greater competition and choice that will promote social mobility, boost productivity in the economy and ensure students and taxpayers receive value for money from their investment in higher education, while safeguarding institutional autonomy and academic freedom. It will help ensure that everyone with the potential to benefit from higher study can access relevant information to help them make the right choices from a wide range of high-quality universities and benefit from excellent teaching that supports future productivity. It will also strengthen the UK's world-class capabilities in research and innovation. (ibid.: 2)

The bill's main recommendations were divided into three main topics: student choice and excellent teaching; smarter regulation; and world-leading research and innovation. Regarding the first of these, the focus was on supporting the establishment of new 'innovative and specialist' providers of higher education to compete alongside existing institutions. The bill stated that the aim was to 'enable the establishment of more new high quality higher education providers so students can choose from a wider range of institutions' (ibid.: 2).

Thus, students would have much more choice about what, where, and how to study, but it was important that these should be 'informed choices'. This would partly be achieved through 'smarter regulation'. Here, there were five stated aims:

- Place students at the heart of higher education regulation.
- Raise teaching quality and standards so students and employers get the skills they need.
- Put more information in the hands of students through a 'transparency revolution'.
- Boost social mobility, life chances, and opportunity for all.
- Enhance the reputation of our world-class higher education system.

¹ The bill was subsequently enacted through the Higher Education Research Act (HERA) referred to in the previous chapter.

In 2019, about 50 per cent of students declared that they would have found it easier to make a decision about what and where to study if all the information about the courses and how to apply was in one place (Department for Education, 2019b). This ‘smarter regulation’ could spur the launch of a national platform answering students’ needs regarding information and guidance. And uncertainty can require flexibility. Choices must be made, based on knowledge of the options available. Choices need to be informed choices.

The bill’s third topic of world-class research is not directly relevant to student learning.

The bill also identified some problems with UK higher education that it aimed to address. These included: the inflexibility of courses, based on the traditional three-year undergraduate degree; students paying higher fees with many not believing they were getting value for money; uneven social access with students from advantaged backgrounds much more likely to go to the most selective institutions than other students; and employers suffering skills shortages while many graduates were in non-professional jobs. The bill also noted the large variation in graduate outcomes between providers, courses and even individual students, while predicting that, by 2022, over half of job vacancies would be in occupations requiring graduates. Massification and diversification were central themes, but social equity, employability, and flexibility were all there as well, and themes were linked to each other.

Student learning pathways were quite central to the 2017 Higher Education Bill, with emphasis on the need for students to be able to make informed choices about a greater diversity of pathways and destinations available to them. These have remained central issues to national policy discussions, with the need for ‘flexibility’ an underlying central concern.

In the immediate context, the higher education minister’s letter to the head of the Office for Students outlining strategic guidance for the financial year 2019/20 identified six topics:

- Value for money;
- Teaching excellence and student outcomes framework (TEF);
- Admissions, marketing, and recruitment;
- Student contracts and consumer rights;
- Innovative and flexible provision;
- International higher education and Brexit.

On innovative and flexible provision, the minister wrote that ‘I would like to see the OfS continue to focus on part-time and flexible learning through a set of ambitious plans to deliver real choice and flexibility throughout working lives, and in response to the needs of business’ (Office for Students, 2019: 3).

The letter identifies a number of strands to government action regarding the development of innovative and flexible provision. These are:

- The use of Access and Participation Plans (to emphasise part-time, flexible and innovative provision to increase diversity in access routes for mature learners).
- To review regulatory and funding arrangements for flexible provision (to promote greater student choice while maintaining quality).
- A Challenge Competition to support flexible learning (by providing greater diversity of provision, including innovation and technical solutions).
- Considering how to raise awareness of accelerated degrees (and to incentivise wider provision and take-up of accelerated degrees, such as the 2-year bachelor’s degree).
- A plan for the use of regulatory powers relating to student transfer (in order to promote awareness among providers and incentivize availability and take up by students generally or ‘of a particular description’).

All of the above make FLPs quite central to UK Government strategies for the future of higher education, although the implementation of those strategies is probably currently being somewhat neglected because of the distractions of Brexit and COVID-19.

Issues of social equity are to be found in several recent national policy initiatives for UK higher education and are also being addressed at institutional level through the requirements for institutional Access and Participation Plans that must be submitted to the Office for Students. These were introduced by the 2018 Higher Education Reform Act (HERA), which identified a set of under-represented groups consisting of ‘potential or current students where the OFS can identify gaps in equality of opportunity in different parts of the student lifecycle’ (Office for Students, 2020: 16). These included students with the following characteristics:

- Students from areas of lower higher education participation, lower household income, and/or lower socio-economic status groups;
- Some black, Asian, and minority-ethnic (BAME) students;

- Mature students;
- Disabled students (those in receipt of disabled students' allowance (DSA) and those who have declared a disability but are not in receipt of DSA);
- Care leavers-. (Office for Students, 2020: 16)

The OfS stated one of the major aims of the above as being for:

All our work to be evidence-based and never lose sight of the individuality of each student. Therefore, the OfS expects providers to consider the way in which these characteristics combine to increase underrepresentation. For example, white British men and women from lower socioeconomic backgrounds are among the most underrepresented groups in higher education. (Office for Students, 2020: 17)

As discussed in the previous chapter, higher education plays a role in both the reproduction and the transformation of the British social class system. In his book on *Social Class in the 21st Century*, Mike Savage observes that:

The spread of meritocratic routes, allowing vast numbers of schoolchildren to gain access to higher education, does not, in itself, produce a more level playing field or spell the end of class divisions. Far from it. Within a highly competitive education marketplace, it is access to the elite institutions which conveys the glittering prizes. (Savage, 2015: 256–257)

The issue of social equity remains a significant challenge in the UK's massified and diversified higher education system. Different learning pathways lead not just to different knowledge and skills but also to different status, connections, and privilege. This is recognized by the political classes, though from different perspectives, with concepts of meritocracy and knowledge society sitting alongside concepts of social inequality and privilege. The achievement of both quality and equality remains an important aim for both national and institutional policies.

Government strategies for the long-term development of higher education in the UK are likely to be strongly influenced by the recent *Review of Post-18 Education and Funding* undertaken by a panel of experienced experts in the field of higher education. Issues of quality and equality were quite central to much of the panel's report and recommendations. The terms of reference for the review were:

To provide a joined-up system that 'is accessible to all, supported by a funding system that provides value for money and works for students and taxpayers, incentivises choice and competition across the sector and encourages the

development of the skills that we need as a country. (Department for Education, 2019a: 9)

This quote quite well captures the combination of consumerism, competition, and the wider public good in strategies for developing the future of post-18 education in the UK. One particularly interesting aim of this strategy is to ‘join up’ the separate sectors of ‘higher’ and ‘further’ education. The further education sector in the UK is effectively education (post-18) which is not ‘higher’ education but is meeting educational and skills needs of the adult population. From this perspective, flexible learning pathways are likely to involve the crossing of boundaries between higher and further education. However, they may also involve crossing boundaries between educational institutions and the workplace, and innovations exploiting learning opportunities available through the internet.

The Post-18 Review Panel identified eight guiding principles for the review:

1. Post-18 education benefits society, the economy, and individuals,
2. Everyone should have the opportunity to be educated after the age of 18.
3. The decline in numbers of those getting post-18 education needs to be reversed.
4. The cost of post-18 education should be shared between taxpayers, employers, and learners.
5. Organizations providing education and training must be accountable for the public subsidy they receive.
6. Government has a responsibility to ensure that its investment in tertiary education is appropriately spent and directed.
7. Post-18 education cannot be left entirely to market forces.
8. Post-18 education needs to be forward looking.

These principles pose challenges for UK higher education. In particular, they pose challenges for maintaining and further developing the diversity of the sector and its relationships with interests and organizations outside the sector. Not every institution of higher education can or will be able to do everything. And an institution may be able to do more things better in collaborative mode with other organizations, both within and beyond the sector. But this poses challenges for the competitive marketplace that higher education has become in recent years. It may also require, to use Burton Clark’s terminology, a shift in emphasis from ‘vertical

differentiation’ of the higher education sector to ‘horizontal differentiation’, as different functions are performed well by different providers of education.

The Post-18 Review contains a list of proposals for the strengthening of the present system to meet future social needs and challenges. It also identifies a ‘core message’, which is:

That the disparity between the 50% of young people attending higher education and the other 50% who do not has to be addressed. Doing so is a matter of fairness and equity and is likely to bring considerable social and economic benefits to individuals and the country at large. (Department for Education, 2019a: 9)

The following proposals are set out in the report:

- Strengthening technical education.
- Increasing opportunities for everyone.
- Reforming and refunding the further education college network.
- Bearing down on low-value higher education.
- Addressing higher education funding.
- Increasing flexibility and lifetime learning.
- Supporting disadvantaged students.
- Ensuring those who benefit from higher education contribute fairly.
- Improving the apprenticeship offer.

The ‘increasing flexibility and lifetime learning’ proposal is justified mainly in relation to changing employment needs that require workers to acquire new knowledge and skills at different life and career stages. It is summarized as follows:

Employment patterns are changing fast with shorter job cycles and longer working lives requiring many people to reskill and upskill. We recommend the introduction of a lifelong learning allowance to be used at higher technical level at any stage of an adult’s career for full and part-time students. To encourage retraining and flexible learning, we recommend that this should be available in modules where required. We intend that our proposals should facilitate transfer between different institutions, and we make proposals for greater investment in so-called ‘second chance’ learning at intermediate levels. We endorse the government’s National Retraining Scheme, which we believe to

be a potentially valuable supplement to college-based learning. (Department for Education, 2019a: 10)

The message from all this for the FLP project may be that learning pathways are increasingly likely to cut across organizational and sector boundaries and will require a flexibility and adaptability from the providers, a better balance between competition and collaboration, but most of all a capacity to change and to innovate while maintaining quality and distinctiveness. From the higher education perspective, it is useful to refer back to the nineteenth-century French sociologist Emile Durkheim's definition of the university, quoted by Burton Clark in the preface to his book, *The Higher Education System*:

It is rare to find an institution which is at once so uniform and so diverse; it is recognisable in all the guises which it takes, but in no one place is it identical with what it is in any other. This unity and diversity constitute the final proof of the extent to which the university was the spontaneous product of medieval life; for it is only living things which can in this way, while fully retaining their identity, bend and adapt themselves to a whole variety of circumstances and environments. (Durkheim, in Clark, 1981)

The extent to which UK higher education, its institutions, and its staff will be able to 'bend and adapt' themselves in order to provide an expanded range of flexible learning pathways to meet the changing and diverse needs of the adult population and the changing and diverse economic and social needs of the society to which they belong is a key question to which the UNESCO-IIEP international project on Flexible Learning Pathways aims to provide some answers.

3.2. Flexible learning pathways: Origins, routes, and destinations

Routes into and through UK higher education have already been referred to in the opening section on the UK higher education system. Now we turn to questions about the roles and directions of flexible learning pathways needed from higher education now and in the future. These will include access and recognition of prior learning, articulation and credit transfer, and part-time education.

However, although this section of the report will take a national focus, it is also relevant to remember that several of the national higher education representatives interviewed for the project expressed doubts as to whether there was a UK higher education system. And this was not just with reference to the four separate nation states that comprise the United Kingdom, but to the traditions of institutional autonomy which remain quite strong within the UK higher education culture and their implications for the diversity of provision on offer in different parts of the country.

The interviewees from UK national higher education bodies frequently referred to the limitations to their powers, the distinctions between what they could require and what they could only recommend to institutions, what they could prevent and what they could only discourage. Indeed, with the shift in funding from government to students as consumers, market needs and pressures were replacing political requirements in shaping institutional policies and priorities. This was welcomed in some quarters but resisted in others.

As an interviewee from the Quality Assurance Agency commented:

There is no such thing as a free market. When you try to create a market system, you get competitive practices to try to attract more students even when there has been a demographic dip. Then, there is competition for survival, not for growth and innovation. (Quality Assurance Agency, staff member, in-person interview)

In some parts of the UK, particularly Wales, there had been a demographic dip in the numbers of students coming to the end of their schooling, potentially leading to falls in the numbers of school leavers applying to enter university. However, the growth in the proportions of school leavers wanting to go to university provided some compensation to the demographic dip, although there were regional differences across the UK in the overall effects on demand for higher education places from school leavers. Thus, depending on location, institutions could need to find new markets, and these could include lifelong learning.

At the institutional level, there were signs that business criteria could be replacing educational and political criteria in decision-making. A member of one of the national policy bodies interviewed commented:

Market competition rather than a national qualification framework is the preference of the present government. And higher education institutions are responding to this in a variety of ways. Competition generally rules over collaboration between institutions. The short-term tends to override the long-term. (national policy body, in-person interview)

But also, as we will see in the following section on the institutional case studies, academic autonomy remains a cultural factor, with many decisions taken at department or faculty levels rather than by institutional managements.

Whether at national or institutional levels, it is always necessary to distinguish between policy intentions, policy implementation, and policy effects. The intended and unintended effects of policies are another important distinction.

However, flexible learning can take a variety of forms and provide a variety of pathways and experiences for learners. The Universities UK project on flexible learning considered flexibility in terms of: (i) the pace of study (from part-time to accelerated study); (ii) the availability of student transfers between higher education institutions, further education colleges, and alternative providers; and (iii) different ways of delivering learning (including classroom-based, online, and employer-based).

The pace of study provides a flexibility to suit individual learner needs and these may themselves change for individuals at different times reflecting different circumstances and needs. At the time of the Universities UK study in 2018, 24 per cent of students were studying part-time and typically taking between four and six years to complete a bachelor's degree. This compared with 76 per cent of students studying full-time and typically taking three years to complete a degree in England. Accelerated degrees had recently been introduced, allowing students to complete a bachelor's degree in two years but devoting more weeks per year to their studies than students on the standard three-year degrees. However, only 0.2 per cent of undergraduate students in England were taking accelerated degrees.

Differences in pace of study represent one important aspect of flexibility, but the full-time/part-time distinction is not just the formal distinction offered by the providers of higher education. It can also reflect the needs and preferences of students themselves. As has sometimes been noted by institutional leaders of UK universities, many of their students are studying part-time even though they are enrolled on full-time courses. With high student fees to pay, they may need to take part-time jobs to earn money. Mature students may well have domestic responsibilities that limit time available to study. However, there may also be opportunities for learning from these experiences outside the university. Flexibility of learning may include different sources of knowledge as well as time differences.

The Universities UK report also notes that many universities are providing undergraduate students on full-time courses with flexibility to meet work or other commitments. Flexibility can include courses that can be studied in evenings, and greater use of technology to enable students to combine online and face-to-face learning at times which are convenient to them.

For part-time students, courses can be classroom-based, employer-based, online, or a combination of all of these methods. As proportions of students in the UK, 14 per cent were mainly classroom-based part-time students, 8 per cent were online (though the figure dropped

to 3 per cent when the Open University was excluded). Eight per cent were employer-based on sandwich² courses, and a further 0.12 per cent on degree/higher apprenticeships.

The question of access to these different forms of learning will be considered in a later section of this report (on access and recognition of prior learning). But here we can note something of the different subjects studied in the different learning modes. Table 5 lists the percentages of students in particular subjects who are studying in these different learning modes.

Table 5. Flexible learning subjects

Types	Subject	Percentage
<i>Classroom-based part-time</i>	Nursing	19%
	Education	16%
	Business studies	12%
<i>Higher and degree apprenticeships³</i>	Nursing	23%
	Computer science	20%
	Business studies	20%
<i>Franchised study⁴</i>	Business studies	19%
	Education	15%
	Nursing	6%
<i>Accelerated degrees</i>	Business, law and accounting (in England)	60%
<i>Sandwich courses</i>	Business studies	29%
	Engineering	13%
	Computer sciences	12%
<i>Online learning</i>	Business studies	12%
	Psychology	9%
	Social studies	8%

Source: Reprinted from *Universities UK, 2018b*

The Universities UK report (2018b: 16) finally considers some of the main drivers of flexible learning, with one obstacle (at the end of the following list):

- **Employer needs:** Growing interest in short courses across disciplines and institutions rather than full-time higher education programmes.
- **Learner expectations:** Increasing pressures on learner time and availability, both from work and home.

² The ‘sandwich’ combines work experience with academic study.

³ Degree apprenticeships are employment-based study linked to a university provider and combining academic and work-based learning leading to a degree. The apprentices are paid employees and the employer also pays the student’s university fees.

⁴ A course offered by an institution leading to a qualification awarded by another institution.

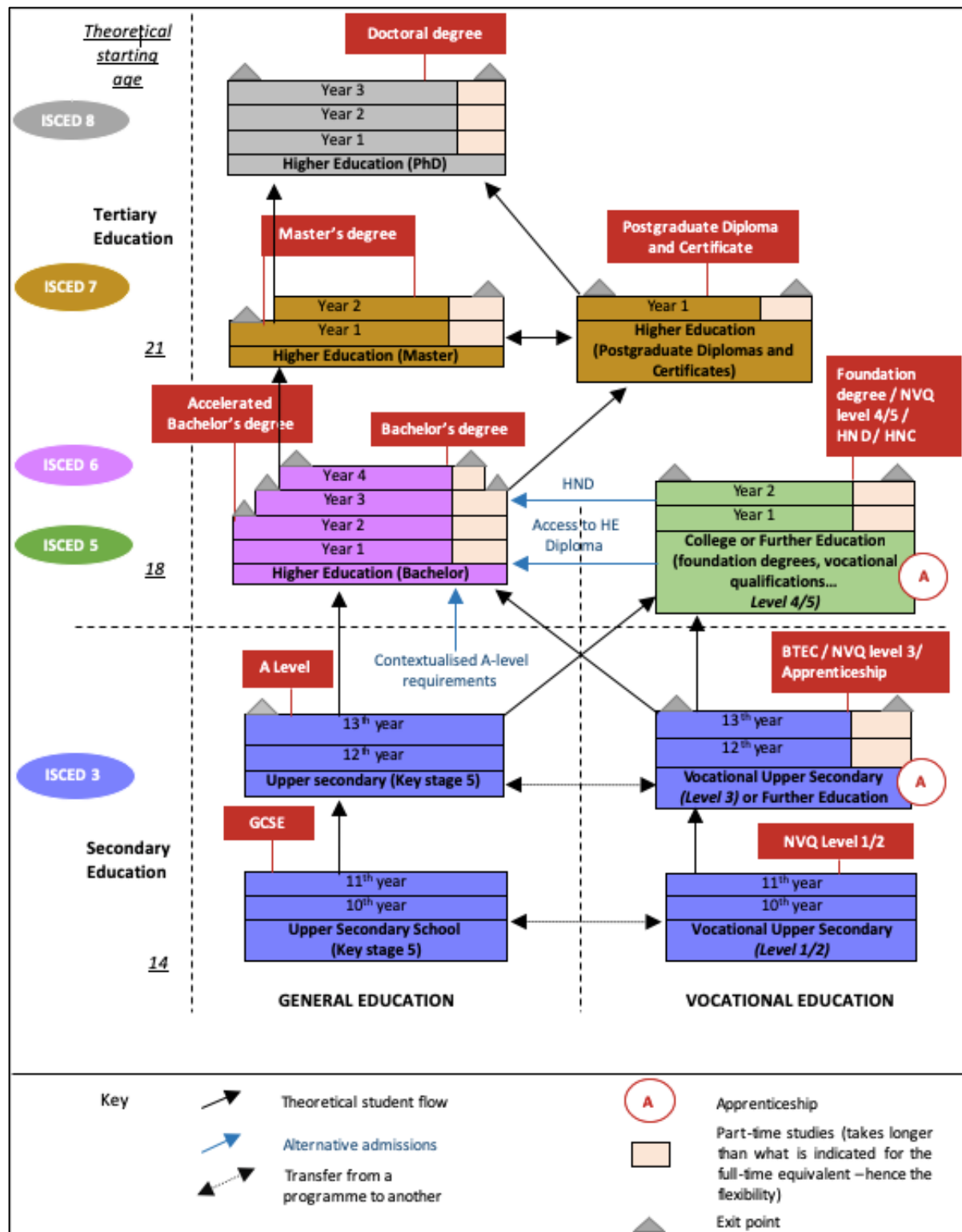
- **Technological change:** Greater national take-up of high-speed broadband and increased familiarity of technology among the adult population.
- **Increased competition for students:** Incentivizes institutions to provide more tailored provision for students who are unable or unwilling to engage in full-time education.
- **Regulation:** Regulatory and funding systems geared towards traditional forms of higher education learning.

Now that the rationale for the implementation of FLPs has been set out, the following parts will focus on their processes – how, when and by whom they can be accessed – and on the instruments the national bodies have to enable flexibility.

3.3. Admissions and pathways to higher education

Figure 1 sets out the overall degree structure in England and the pathways from one institution and programme to another. There are slight differences between the English, Irish, Welsh, and Scottish systems but, as mentioned earlier, this report focuses mostly on England. The figure will be explained throughout the following parts.

Figure 1. Overall degree structure in England



Source: Elaboration by the author

Traditionally, access to higher education occurred immediately following completion of secondary education and required students to obtain good results in the General Certificate of Secondary Education (GCSE) and at Advanced (A) level. This remains the major access route

into higher education, although A-level grade requirements differ substantially between courses and institutions, reflecting reputation and perceived quality.

However, there are many different routes into higher education today, especially for adults and for students wishing to study part-time. The Open University offers open access to its undergraduate courses. Many other providers offer routes into higher education involving Access to Higher Education diplomas obtained from different sources and sometimes involving work-based learning and skills development outside higher education. There are also credit-transfer arrangements which allow certificates gained in one institution to contribute towards certificate gains in a different institution, thus enabling students to move between institutions. While many higher education institutions have credit-transfer arrangements with other institutions, a few of the more elite institutions do not and in general the credit-transfer opportunities are not greatly used currently.

National policy is not restrictive as to admission criteria and processes for entry to higher education. As a member of the Government's Department for Education remarked during an interview for the project: 'Admissions criteria and processes are for institutions to determine, although they will be reviewed by the Office for Students as part of its procedures for the registration of higher education providers' (Department for Education, staff member, in-person interview).

Admission procedures differ across the sector and within institutions, reflecting differences in student demand, institutional priorities, and course characteristics.

Access to Higher Education Diploma students are able to gain exemption of up to 50 per cent of their required credits through recognition of prior learning (RPL). RPL is defined by the Quality Assurance Agency as 'the generic term for processes used to recognise learning achieved outside of the formal course of learning designed to support student achievement of a named Diploma. It includes recognition of both experiential and certificated learning'.

Experiential learning may be achieved in a range of learning contexts and is recognized as being equivalent to the learning required for one or more units of a named diploma. Certificated learning is the process whereby previously assessed and certificated learning is recognized as demonstrating achievements equivalent to one or more units of the named diploma. There is a formal process of validation for the management of RPL undertaken by Access Validation Agencies (AVAs), which are themselves responsible to the Quality Assurance Agency. More

information about RPL is provided in a later section on the role of the Access to Higher Education Diploma.

Part-time study is an important form of flexibility, allowing the educational experience to take place alongside other activities, with paid employment or domestic responsibilities being the typical ones. However, looking at changes in the numbers of entrants to part-time courses, at the undergraduate level between 2007/08 and 2016/17, there was a decline of 31.8 per cent in the numbers of students on part-time first-degree courses, compared with a rise of 27.8 per cent on full-time first-degree courses. At the postgraduate level, a different pattern emerged with only a 2 per cent decline in the numbers of part-time students on taught courses and only a 1.9 per cent decline in numbers of part-timers on research courses. However, these figures compared with increases in numbers of full-time postgraduates of 45.2 per cent on taught courses and 28.9 per cent on research courses.

The decline in numbers of part-time students has given rise to considerable concern within both higher education and government and policy bodies. Possible reasons for the decline include the changes in funding, with the students themselves having to find the resources. However, many part-time students have the advantage of combining their educational studies with paid work experience. Even students on full-time courses can be effectively studying part-time if they are also undertaking some paid work to help meet the costs of studying.

Another reason for the decline in the numbers of students on part-time courses may lie in the massive expansion of higher education for school leavers entering full-time higher education courses on leaving school. Whereas the major demand for adult part-time courses in higher education came originally from people who had ‘missed out’ on the higher education experience after leaving school, that market is today much smaller, with around 50 per cent of school leavers going into higher education compared with fewer than 10 per cent 50 years ago. However, policies for flexible learning pathways often envisage a need for many people (including graduates) to return to education at several times over their working lives in order to update or change their knowledge and skills to meet changing employment needs. The concept of lifelong education is quite central to the concept of knowledge societies and flexible learning pathways are likely to be quite central requirements in those societies.

A recent report from Universities UK, *Routes to High-Level Skills*, examined the role played by partnerships between higher education, further education, employers, and other parts of the tertiary education system in meeting the growing and changing economic and social needs for

a highly skilled workforce. It noted the difficulties in achieving effective partnerships of this kind. Different partners could bring very different interests and expectations to the partnerships. However, when effective, partnerships could provide pathways and courses that were industry relevant, met defined skills needs, provided coherent progression and flexible opportunities to engage in learning. The report identified a number of issues for further consideration:

- Identifying regional skills needs.
- Identifying a local focal point for collaboration.
- Raising awareness of the opportunities and pathways to higher education.
- Role of regulatory bodies in encouraging partnership development.
- Funding to support development and increase reach.
- Funding for learners.

The report indicates that many flexible learning pathways will need to take learners beyond the boundaries of higher education but that there are considerable challenges in doing so.

Another report by Universities UK (Universities UK, 2018b) identified the main drivers of flexible learning as: employer needs, learner expectations, regulation, increased competition for students, and technological change. It distinguished three main types of flexible learning: classroom-based, online, and employer-based learning. It further distinguished between classroom-based part-time, franchised study, higher and degree apprenticeships, accelerated degrees, sandwich courses, and online learning. There were significant subject differences between types, although business studies were everywhere.

There is considerable diversity in the current admission and flexible learning pathways in UK higher education. There is a lot happening, but the extent to which it is meeting the diversity of needs and expectations of learners and funders and the economic and social interests they represent seems to be an unanswered question at the present time.

We turn now to the three core themes of the FLP project.

3.4. Access and recognition of prior learning

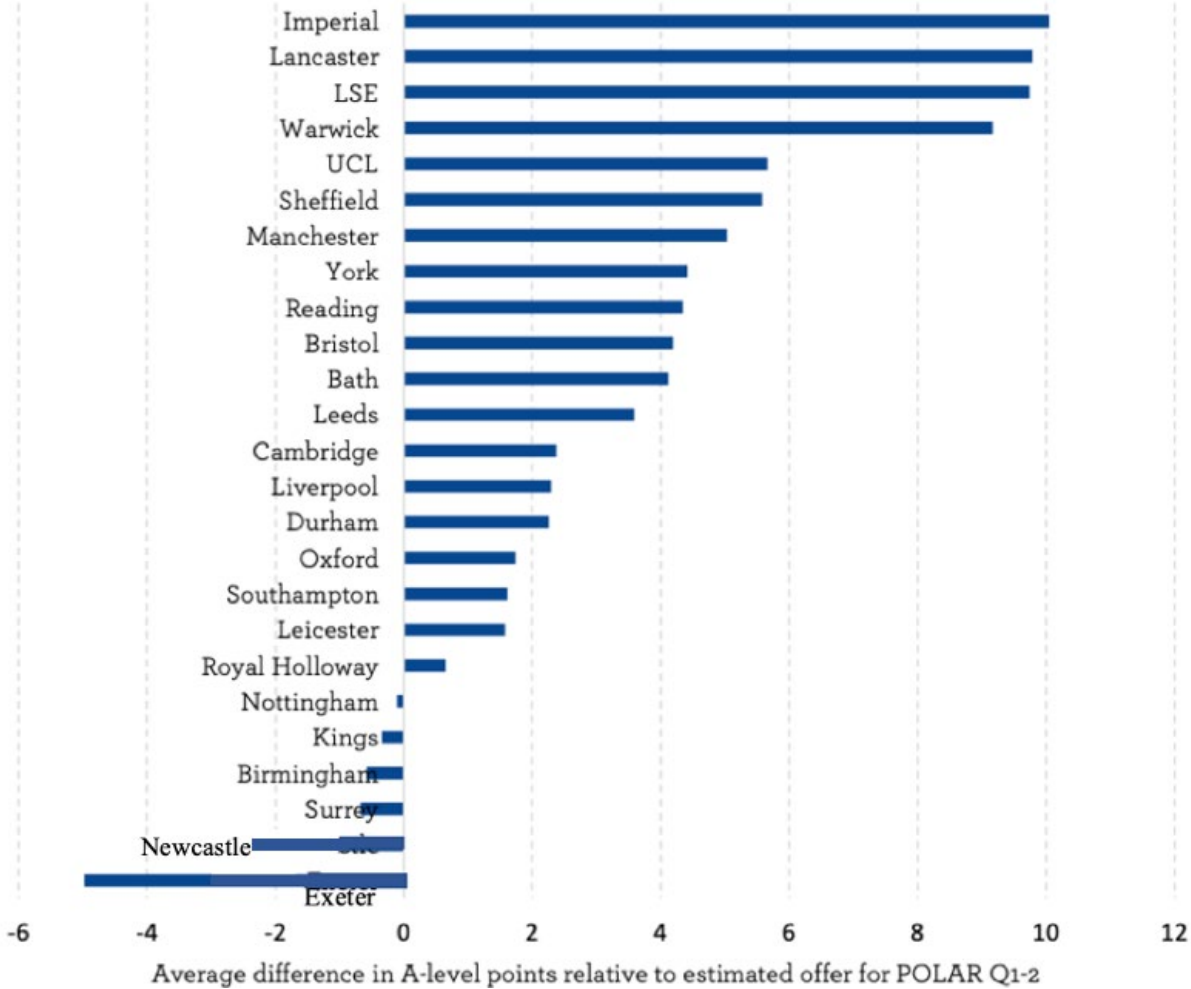
3.4.1. Entry routes into higher education

Entry routes have different starting points with different entry requirements (including costs, as well as qualifications). They are accessed by learners at different life stages and for different reasons, and may be heading in different directions. There are several entry routes into UK

higher education. As already mentioned, the traditional route for school leavers is dependent on their achievements in their advanced level examinations (A-levels) for the General Certificate in Education (GCEs). Following their General Certificate of Secondary Education examination, usually taken at or near age 16 in a range of subjects (generally about eight), students focus on three (sometimes four) subjects at A-level and it is their performance in these subjects that determines their entry to a higher education course. Generally, higher education institutions will require A-levels in particular subjects and specify the grades to be attained in the examinations. It is a competitive process, with the more prestigious universities requiring higher grades than other institutions.

However, recognizing social equity considerations, universities have begun introducing more contextualised requirements for A-level grades. This has meant reducing the grade requirements for students living in socially disadvantaged areas or having other features of social disadvantage. In other words, the lower grade is not taken to necessarily reflect lower ability of the student but is understood as reflecting disadvantages in their previous educational experience. In practice, a minority of the UK's most selective universities, the Sutton Trust (ST) 30, offer genuine contextualised requirements for A-level grades. The chart below compares the average A-level scores of students from low-participation neighbourhoods (Q1 and Q2 of the POLAR classification) with the average offers made across all courses for which the authors could estimate. Positive numbers mean that the average A-level scores of students from low-participation neighbourhoods exceed the scores the authors estimate were achieved by students from high participation neighbourhoods. In this case, the students from disadvantaged backgrounds who entered higher education had outperformed their advantaged peers at A-level examinations. This means that universities which have a positive average difference are less likely to contextualise their offer and to enhance social justice. The chart shows that the universities of Exeter and Birmingham, two of the institutions discussed in the next chapter of this report, were more likely to take students' social disadvantage into account in their recruitment process. Thus, better and more systematic contextualised requirements for A-level grades could be taken up in numerous universities.

Figure 2. Difference between estimated offer made to students from high-participation neighbourhoods and average A-level scores of students from low-participation neighbourhoods (Q1–Q2 of the POLAR classification*)



*The Participation of Local Areas (POLAR) classification is a UK-wide measure of educational disadvantage based on participation rates in HE. POLAR is divided into five quintiles, with the lowest young participation (most disadvantaged), up to quintile 5 areas with the highest rates (most advantaged).

Source: Reprinted from Boliver et al, *Admissions in context - the use of contextual information by leading universities* (2017).

However, there are some caveats to be considered as to the significance of this data. First, it was collected for admissions in the academic year, 2012/13; and, second, it assessed only one dimension of social disadvantage. Since the data were collected, there has been a significant increase in policy initiatives to widen participation in higher education and to achieve greater social equity across the higher education system. To take one example, the London School of Economics (LSE) has been using a range of measures of social disadvantage in making contextual offers to students, the main ones being whether the applicant: (i) lives in a low-participation neighbourhood; (ii) is attending a low-performing school, measured by GCSE and A level examination results; (iii) has spent time in local authority long-term care; and (iv) other

relevant factors (for example, difficult family experiences or disrupted education). This has resulted in a 150 per cent increase in the numbers of students recruited from socially disadvantaged backgrounds.

As noted previously, higher education institutions in the UK have considerable autonomy, including in their recruitment practices and admissions criteria. In a sense, every institution is different! And for this reason, it was not possible to acquire more up-to-date data on contextualized admissions across the UK higher education system. A senior member of the Office for Students (OfS) explained that ‘there’s no public data on contextualized admissions as providers change offers for all sorts of reasons, not just social background’ (Office for Students senior staff member, email exchange). The OfS staff member went on to explain that:

All of the most selective providers committed to contextual admissions policies in their 2020-21 onwards access and participation plans, though the approach to that differs. For Oxbridge it’s concerned with contextualizing performance to choose between candidates with very high entry requirements. For others, there is a genuine reduction of entry grades. (Office for Students, senior staff member, email exchange)

Because high selectivity in student admissions is regarded as a key measure of institutional reputation and quality, public information on detailed admission practices is quite limited. However, a recent report (Durham University Evidence Centre for Education, 2020) presents research that shows that students admitted to prestigious universities on the basis of contextualized offers go on to achieve good university results, comparable to those achieved by students admitted through standard offers.

Another alternative entry route to higher education is for students who did not study for the A-level qualifications but had selected more vocational BTEC (Business and Technical Education Certificate) courses in their final school years. These would generally be regarded as more practical and less academic than the A-level courses but students who take them successfully can use them as entry routes to higher education, typically into vocational degrees in subjects such as business and engineering, and generally into less prestigious institutions.

However, several interviewees did comment on the reputation risks that institutions ran when opening up their admissions processes to diverse and contextualised procedures: ‘There is a risk. If it appears to be too easy to gain admission to a course, this can be interpreted as evidence that it is a low-quality course and deter some potential applicants from applying’ (case study institution, senior staff member, in-person interview).

However, there are also potential risks for universities in ignoring the social equity considerations when recruiting students. The Office for Students has identified changes that need to be made across the higher education sector regarding student admissions, the main ones being:

- University admissions will need to change radically to achieve fair access. While there has been some progress as a result of the increased use of contextualised offers, gaps in equality of access exist between the most and least advantaged groups and remain wide.
- Universities will therefore need to rethink how they are judging merit, rather than focusing narrowly on A-level scores. A more radical use of contextualised admissions is one way to achieve this contested shift.
- Through reforming access and participation flows, the OfS will instigate more honest self-assessments, more ambitious targets, more evidence-based measures, and better evaluation.

Over the last decade, many universities have been developing a range of outreach support services to encourage greater participation by students from socially disadvantaged backgrounds. These have included working with schools in socially disadvantaged areas, providing pre-entry outreach work, and generally providing greater flexibility in entry routes into learning pathways in higher education.

3.4.2. Further education

Both BTECs and A-levels can also be taken in further education colleges, which students can enter after the formal school leaving age of 16. Linkages between post-school education in these colleges and post-school education in universities can occur in various ways. And around 10 per cent of UK higher education actually takes place within further education colleges. There are also extended ‘foundation degrees’ where students begin their studies in further education colleges and then transfer to university for their later years of study. There can be a wider age range of students in further education colleges, compared with the final years of schooling. Adults of all ages may take courses in further education colleges. Further education therefore can provide flexible pathways of entry into higher education for a very diverse range of potential students.

The role of further education and its relationship to higher education is a major theme of the Government’s recent report on Post-18 Education. There was a view expressed by members of several of the national agencies interviewed for the FLP project that ‘further education in the

UK is changing and innovating but higher education is not'. A member of the Government's education department commented: 'Good value and more flexible further education is better than poor value and rather inflexible higher education' (Department for Education, staff member, in-person interview).

Further education colleges have been important providers of certificates and diplomas at levels below that of a degree but which can also be important stages on the pathways to a degree. However, a member of one national higher education body observed that: 'Certificates and diplomas at these levels are often perceived as "failures" but they can be important mechanisms for flexible provision using modular structures and credit accumulation over time' (Quality Assurance Agency, staff member, in-person interview).

However, a member of one national higher education policy body did observe that:

The links between further and higher education are becoming more important and there needs to be more of a 'level playing field' between them. Further education is very different from higher education in terms of its organizational funding structures and it is possibly more socially responsive to the needs for change and innovation. More generally, the UK system is unique, especially in the autonomy possessed by individual institutions. (national higher education policy body, staff member, in-person interview)

The challenges posed for the implementation of national policies by the UK traditions of institutional autonomy in higher education was a recurring theme in the interviews with policy body representatives.

3.4.3. The Access to Higher Education Diploma

A major route into higher education involving the recognition of prior learning is the Access to Higher Education Diploma.⁵ Students taking these diplomas can gain exemption from some of the credits required to obtain the diploma through the recognition of their prior learning. Up to 50 per cent of the credits required for a diploma can be awarded by this means, although, for some diplomas, the limit is lower than 50 per cent.

The diploma has now been in existence for nearly 40 years and has provided a flexible route into higher education institutions for adults from diverse backgrounds and with varied experiences. Credits could have been acquired from a variety of sources to the point where there was equivalence with the standard post-school entry qualifications to higher education.

⁵ Much of the following information on the Access to HE Diploma was provided by Ian Kimber and Julia Mixon of the Quality Assurance Agency.

Recognition of prior learning (RPL) is the generic term for the processes used to recognize learning achieved outside the formal course of learning leading to a particular named diploma. It includes experiential learning, in the workplace or community, as well as certificated learning. There are 11 Access Validating Agencies (AVAs) which are licensed by the Quality Assurance Agency and which accredit prior learning achieved in a variety of learning contexts. Nine of the AVAs are also awarding bodies of the diplomas. The AVAs are effectively companies.

Around 38,000 students per year are now achieving Access to Higher Education diplomas and about 25,000 per year are entering higher education degrees by this route. Forty-five recognized credits, which could be a mixture of certificated and experiential learning, were required for entry and needed to include at least 15 units graded by the provider.

Accreditation of prior *certificated learning* is the process by which learning that has already been assessed and certificated can be recognized as equivalent to the learning required to achieve one or more units of a named diploma. No credit is awarded to the student because previous learning will have already been certificated. However, students are exempt from the need for achievement of credit equivalent to that required by the diploma.

Accreditation of prior *experiential learning* is the process by which non-certificated learning achieved in a variety of learning contexts is recognized as equivalent to the learning needed to achieve one or more of the units required in order to obtain a named diploma. If the evidence satisfies the requirements for learning outcomes of the unit being claimed, the student is awarded the associated credit for the unit, although the credit is not graded.

Possession of the Access to Higher Education Diploma can be an important route into a full-time degree course in fields such as health, teaching, and business, with 59 per cent of diploma holders entering these fields. However, it is argued that there is need for more part-time degrees in order to increase the options available for mature students.

The recognition of prior learning, whether already certificated or not, is a flexible process by which learning achieved in a variety of contexts can be used to provide and legitimize different entry routes into higher education. Through the external validation processes, admission is legitimized. It is a process being used increasingly by new and alternative providers of higher education and by universities with strong commitment to their local communities.

3.4.4. Open pathways to all

A final route into UK higher education is through the Open University, which, from its origins in the late 1960s, has been ‘open to all’. There are no entry requirements for most undergraduate courses and there are currently more than 120,000 part-time undergraduate students at the Open University.

Students enter the university at any age, although the largest increase in student numbers in recent years has been for young recent school leavers, combining their studies with paid work. Courses are delivered to students online although students are also assigned tutors who they may meet face to face. More details about Open University part-time courses are provided in the next chapter of this report.

3.5. National policy issues

Key issues affecting access and entry routes into UK higher education today include the costs of student fees, the employment prospects for today’s much larger graduate population, and the stratified differentiation of the higher education sector. ‘Where’ you study generally matters more than ‘what’ you study in the UK and there are significant social inequalities in the entry routes to different institutions.

Government representatives interviewed for the project indicated that there was a lot that still needed to be done in order to widen access and participation in higher education. Pressures on institutions to do so were increasing, especially in respect of greater social equity in student recruitment. The links between further and higher education were becoming more important and there needed to be more of a ‘level playing field’ between them. Further education was very different from higher education in terms of organizational and funding structures and was possibly more socially responsive to the need for change and innovation. At the higher education level, the autonomy of individual institutions posed considerable challenges for the development and implementation of national policies. One interviewee from a national policy body remarked that ‘Relationships between further and higher education institutions can be quite competitive when they really need to be collaborative. Working together, colleges and universities can provide a lot more to their local communities’. (national higher education policy body, staff member, in-person interview)

Government priorities in widening participation were mainly focused on ethnic minorities, people with disabilities, and people from disadvantaged backgrounds. There was also concern about retention rates. Mature students were rather ‘on the edge’ of current policies: they

deserved support but were not a priority. The focus was mainly on ‘initial entry’ into higher education, rather than ‘returners’ and ‘pathways’.

There was support for part-time students, who were usually mature, and the Office for Students had been trying to raise awareness of their importance, although their numbers were in decline. Government seemed currently to be more supportive of ‘accelerated degrees’ (two years, full-time) rather than longer part-time provision, although there was also recognition that more part-time provision and learners were needed. Related supports, such as credit transfer and the recognition of prior learning, were important, but it was felt that they were often difficult to achieve. The absence of national certification systems for these and other forms of learning was a problem. Innovations occurred from institutional initiatives rather than national policies and the latter could sometimes block the possibilities for change and innovation.

During one of the interviews at the Quality Assurance Agency, it was pointed out that ‘Election manifestos of the major UK political parties referred to the need for greater integration between further and higher education’ (Quality Assurance Agency, staff member, in-person interview) and that:

A more diverse system with considerable institutional autonomy and independence from government control is part of current government strategies which are intended to utilise market mechanisms to develop and provide diverse tertiary education to meet diverse economic and social needs. (Quality Assurance Agency, staff member, in-person interview)

In general, there appeared to be a government view that universities needed to align themselves more effectively with local authorities and further education providers.

There was also a generally expressed view as to the need for more access routes into higher education, with one interviewee noting that access to higher education seemed only to be ‘reviewed every 30 years’ by government. Overall, the view of members of national higher education bodies seemed to be that there were already plenty of learning pathways available but a lack in the flexibility required to meet the needs of potential students to gain access to them at different life stages. It was also pointed out that there had been little regulation and no leadership for flexible learning pathways and that ‘Flexibility relates to lifestyles of individual learners and is therefore ‘bottom up’ rather than ‘top down’ in the policy process’ (Universities UK, staff member, in-person interview).

The shift in emphasis from government policies to market demands in driving future developments was a reflection of this view, although a view was also expressed that ‘there is too much learning by too many people’!

3.6. Articulation and credit transfer

3.6.1. Crossing educational boundaries

Articulation refers to learning pathways crossing institutional and subject boundaries, with credit transfer being a necessary mechanism to enable students to do so without losing recognition for learning outcomes already achieved. Boundary crossing can become necessary when needs and/or aspirations change, and learning is often a powerful driver of such change. But in education, boundary crossing requires recognition of learning acquired already and in different places. Credit for previous learning needs to be transferred.

There was recognition by national policy bodies that there was no national credit transfer system in UK higher education, though there were national arrangements in Scotland and Wales. In England, a member of the Office for Students observed that:

There is no national credit accumulation and transfer scheme although many providers do have available linkages with other providers which give students opportunities for cross-institutional transfers, though the opportunities are not often taken. (Office for Students, senior staff member, in-person interview)

Some providers did offer additional qualifications (certificates for individual modules) and recognition of prior learning. And some providers had begun to specialise in the provision of short courses, especially directed at the needs of mobile students, transferring between and within institutions. Some examples will be given in the next chapter.

The absence of a national system for credit transfer reflected the traditions of institutional autonomy and academic freedom in British universities. There was recognition that credit transfer was needed but it was difficult to achieve. Credit transfer could give students much greater flexibility as to what and where to study. But it required a reasonable degree of comparability and ‘conformity’ between providers. Thus, there was tension between meeting the need for greater diversity of provision and meeting the need for students to be able to transfer between providers. The curriculum at one institution could be designed and presented differently from the curriculum at another institution, ensuring diverse provision but also making movement between the two institutions quite difficult for students.

The way credit transfer was organized could have important and negative consequences for institutions. In particular, there was a reputational risk. As a member of the Quality Assurance Agency remarked, ‘If you have a group of students who want to move from one university to another university, there can be significant reputational risk to the first university in allowing it to happen’ (Quality Assurance Agency, staff member, in-person interview).

As well as the reputational risk to institutions, the interviewee also emphasized the likelihood of:

- loss of fee income when students transferred;
- mismatch of curricula, with lack of alignment of study content of modules at different institutions;
- failure to meet professional body curriculum requirements.

At the national level, according to the Government’s Department for Education, 91 per cent of student credits could not be transferred between institutions because they did not fit with each other and did not link well with subject benchmark statements. The latter did provide some comparability of academic levels and threshold standards to inform employers and the general public. Non-completion brought obstacles for student transfer and different institutions had different approaches to the costing of models.

The view taken in the various national policy bodies was that greater collaboration between institutions would be needed to support more articulation and credit transfer. But present pressures to create a more marketized higher education system and bring in new providers was bringing greater competition rather than collaboration between institutions.

In the context of lifelong learning, and the need for many people to be ‘stepping on and off’ higher education pathways several times over their lifetimes, current arrangements could affect negatively the likelihood of them stepping back on. Fee levels discouraged mature and part-time students and there was a view that fees and student loan arrangements needed to be more flexible, allowing students to build up their credits, whether or not they achieved an eventual qualification. More work and recognition of the benefits of credit transfer in a lifelong learning context were needed.

3.6.2. Crossing organizational and sector boundaries

In a lifelong learning context, boundaries extend beyond the formal education sector and potentially can combine learning opportunities in many different contexts. Learning takes place

in the workplace, in the community, and online, and knowledge transfers result, to the benefit of both learners and wider society.

A recent report by Universities UK considered the potential of new partnerships between higher education, further education, employers, and other parts of society to address skills challenges ‘by providing integrated pathways to higher level skills for learners on vocational and technical, as well as traditional academic routes’ (Universities UK, 2018d: 1).

The report was based on a project which examined the operation and effects of eight partnerships between universities and other organizations in different parts of the UK (Commission for Employment and Skills & Universities UK, 2014). In so doing, it took account of the diversity of initiatives and contexts, and examined how higher education institutions across the country were developing innovative approaches and looking beyond traditional models to ensure that their collaborations were effective ‘and that pathways and courses developed are industry-relevant, meet defined skills needs, provide coherent progression and flexible opportunities to engage in learning’ (Universities UK, 2018d: 1).

This was regarded as essential not only to develop new talent with the skills needed in the future but also to ensure the upskilling and reskilling of the current workforce in order to respond to changing skills needs.

The project’s report explores the extent and nature of partnerships between universities and other organizations in providing learning pathways which bring benefits both to students and to the partner organizations. A number of major conclusions were drawn from the project:

- Collaboration generally developed from existing relationships between universities and other organizations. Key drivers were economic (new skills needs and improving graduate employability), social (enhancing accessibility to a range of potential learners and supporting social mobility), and in response to policy developments (such as degree apprenticeships).
- Additional benefits included shared learning and staff development, enhanced financial sustainability, and stronger relationships and opportunities to develop new partnership projects.
- Challenges of collaborations were that partners brought ‘competing interests, demands and expectations as well as different terminology and perspectives’. And higher education institutions needed to set aside competitive attitudes and replace them with collaborative ones.

- Success factors were:
 - ‘Finding spaces (subject, level or target student) for collaboration where institutions do not see themselves in competition’.
 - ‘early identification of a shared goal or vision’.
 - ‘recognising and respecting the strengths of partners’.
 - ‘identifying and mapping progression routes’.
 - ‘focusing on the specific needs of the locality’.

The report ends with a list of ‘issues for further consideration’:

- Identifying regional skills needs.
- Identifying a local focal point for collaboration.
- Raising awareness of the opportunities and pathways to higher education.
- Role of regulatory bodies in encouraging partnership development.
- Funding to support development and increase reach.
- Funding for learners.

A final consideration of the Universities UK report concerns the balance between the universal and global role of universities as knowledge organizations and their local and regional role in supporting changes and innovations which benefit the communities of which they are part. These questions were also considered by a UK project directed by the present author, which examined the role played by universities in the development and transformation of their regions (Brennan et al, 2018). The project explored the ways in which universities attempted to overcome the challenges they faced in addressing the needs of their local communities. Problems of communication, reward and recognition, academic cultures and traditions, as well as financial issues, all needed to be overcome if the flexibility needed to provide new pathways, innovations, and transformations to support the development of the places of which they were such an important part was to be achieved.

Articulation and credit transfer are part of the larger issue of the shifting role of higher education institutions in changing knowledge societies. In the marketized UK higher education system, it is not only the students who are the customers but the whole of the society, locally, regionally and nationally, and all set within an increasingly globalized economy and society. Innovations

in articulation and transfer processes are occurring and some examples are provided in the next chapter.

3.7. Employer perspectives

The studies referred to above examined learning pathways that took learners beyond the boundaries of educational institutions to engage with other organizations and contexts which also provided learning opportunities. Within the concept of ‘knowledge society’ (Bindé, Matsuura & UNESCO, 2005), knowledge is potentially everywhere. However, its transmission and recognition are often problematic.

A staff member of the Department for Education confirmed that:

Regarding workplace learning, there are no formal arrangements for its recognition and certification. Some educational institutions enter partnerships with employers, and these can involve certification of learning outcomes. But there is no formal system for the certification of learning outside the boundaries of institutions. (Department for Education, staff member, in-person interview)

In the ‘knowledge economy’ (Kahin & Foray, 2006), employers need workers who can both bring new knowledge and skills to their workplace and quickly acquire the new knowledge already available in the workplace. In combination, the two-way transmission of knowledge between higher education and employment could deliver the routes to high-level skills discussed above.

The knowledge and skills needed for employment constantly change and create new learning needs. An interviewee from Universities UK expressed the following view:

As careers change, people will need to reskill and take different career paths. They might need to do some learning at levels 3 or 4 even if they already possess qualifications at level 6. The Government is very keen for there to be strong vocational learning pathways alongside the academic pathways, although without any clear definition of what vocational is. (Universities UK, staff member, in-person interview)

Nonetheless, it seems that not all universities provide students with the same skills when entering the labour market. More specifically, students coming from the Russell Group universities were slightly more likely to work effectively with number thanks to their higher education experiences – to ‘a great extent’ for 26.1 per cent of them, compared to 20.4 per cent of students from the University Alliance (Higher Education Statistics Agency, n. d). Similarly, 45.7 per cent of students from the Russell Group deemed that their higher education enabled

them to take initiative and personal responsibilities in their work ‘to a great extent’, compared to, respectively, 43 per cent and 39.7 per cent for students from Million+ and the University Alliance. Besides, depending on the mission group of the university they attended, students earn different salaries. This highlights the existing vertical hierarchy between universities – especially between the Russell Group and the others, given that students from Million+ and the University Alliance have similar characteristics. In 2016, 88 per cent of students from a Russell Group member earned more than £21,000 a year three years after completing their course, compared, respectively, to 73.7 per cent and 70.8 per cent of students from University Alliance and Million+ institutions (Higher Education Statistics Agency, n. d.). Table 6 indicates the differences in salaries achieved by graduates from the different university mission groups. But, in the end, although vertical differences between universities and mission groups do exist, they are not that significant.

Table 6. UK-domiciled leavers 2012/13 in full-time paid UK employment (excluding self-employed) by HE provider mission group and salary band, three years after completing their course.

	Russell Group	Million+	University Alliance
Median salary	£30,000	£25,000	£26,000
Lower quartile	£25,000	£20,000	£21,000
Upper quartile	£39,000	£32,000	£32,000

Source: Adapted from Higher Education Statistics Agency, Destination of Leavers from Higher Education Longitudinal survey (n. d.).

Relevant employer perspectives on learning pathways were obtained from the chief executive of a national employers’ organization. The organization itself was mainly focused on recruiting new young graduates into their first jobs. However, there was a mix of short-term and long-term perspectives on doing this. The more professional jobs required immediate knowledge and skills capabilities. But there were also jobs which required leadership and other transferable skills in the longer term. Lifelong learning was an accepted fact and was becoming increasingly important. Employers needed to recruit people they could train and develop to work and succeed in ‘unknown futures’. They did not know what they would want in the long term, so they needed to recruit people who were flexible and capable of change and development. ‘Resilience’ was a key graduate skill requirement.

The chief executive (CE) was aware of today’s continuous retraining needs and noted that universities were competing with new alternative providers in meeting those needs. There were growing numbers of training and development companies because, in the view of the CE, UK businesses had generally not invested enough in training. Yet, some courses that should be

preparing their students for work were not doing so effectively because they were not keeping pace with changing employment requirements. Degree apprenticeships were very often the best way of meeting these new work requirements. They did so by providing learning pathways that were continuously crossing the boundaries between education and work.

The CE predicted a more volatile future in which employees would need to be able to adapt quickly to changing requirements and contexts:

Universities need to do more to adapt to the pace of change and the need for adaptability and flexibility in the graduates they produce. Independent training will be there to provide it if higher education fails to do so. (Institute for Students and Employers, Chief Executive, online interview)

Increasingly, there was a need for more interdisciplinary learning which could provide students with a broad range of skills and help them apply them to real-world problems.

3.8. Part-time learning

In a sense, most learning is part-time. Lives are not just spent in libraries and lecture theatres. However, the amount and pace of learning is clearly affected by how much time is devoted to it. Traditionally, part-time courses have tended to recruit more mature students who often needed to fit time for learning around busy domestic and working lives. The part-time courses would typically cover the same knowledge content as full-time courses in the same subject but would take longer to do so.

The major UK provider of part-time higher education has been the Open University, providing distance learning opportunities for adults of all ages and backgrounds. The Open University has provided and continues to provide a wide curriculum across all academic fields whereas part-time study in a lot of other higher education institutions has a more vocational and professional focus. More information about the Open University and the innovative flexible learning pathways it has developed in recent years is provided in the next chapter of this report.

Though part-time student numbers have been falling at the Open University, they have been falling at even greater rates in other higher education institutions. This may partly reflect the increased fee levels. As an interviewee from the Quality Assurance Agency remarked, ‘There are decreasing numbers of part-time mature students because they can’t afford it’ (Quality Assurance Agency, senior staff member, in-person interview).

There have been recommendations that student loans should become lifetime loans and the QAA interviewee criticized the current student loan arrangements: ‘Generally, the financial model is based on the 18 year old coming in to do a full-time degree based on a loan’ (Quality Assurance Agency, senior staff member, in-person interview).

Flexible lifetime learning pathways required flexible funding arrangements, such as the ‘lifelong learning allowance’ proposed in the Post-18 Review referred to above.

However, there were other factors impacting on the demands for part-time higher education. One was the growth and greater diversity of full-time higher education in the UK. With more people undertaking full-time degrees after leaving school there are fewer people wishing to obtain a degree at a later life stage by part-time study. There is also a wider range of alternative learning opportunities and pathways.

A recent report for the Sutton Trust (Callender & Thompson, 2018), a charity that provides support for equity-related educational issues, addressed the issue of declining numbers of part-time students in UK higher education as a result of the huge increases in student fees. Between 2010 and 2015, numbers nationally had reduced by 51 per cent. The report shows that 40 per cent of the decline was due to fee increases, with home students from England experiencing a real-terms increase in fees of 246 per cent between 2011 and 2012. The biggest drops in numbers were among mature students over the age of 35, those pursuing sub-degree qualifications, and those on low-intensity courses (lower than 25 per cent of full-time equivalent).

The Sutton Trust report emphasises the importance of part-time undergraduate study as a vehicle for social mobility, which offers those with family or work responsibilities, who would otherwise be unable to study, a more flexible pathway through higher education. It would be a slower route but, when combined with work experiences and domestic responsibilities, could be an effective pathway to social mobility for people who had, for various reasons, not been able to enter higher education after leaving school.

It is worth noting, however, that the report shows that there had been a bigger fall in numbers of part-time students among the more advantaged groups, thus supporting the point made previously that another significant reason for the fall in numbers of part-time students has been the rise in numbers of full-time students.

A limitation of the Sutton Trust report is that it focuses mainly on an initial degree and not on the growth of needs to update and change knowledge and skills required in the evolving

knowledge society. In the context of the UNESCO project and its focus on flexible learning pathways throughout life, part-time education plays a central role. And it is not necessarily about acquiring new qualifications but about updating old ones, reflecting societal needs larger than just the mobility needs of individual students.

Another question relevant to part-time study is whether the students want the qualification or the knowledge (or both). As indicated in the national student statistics data in Annex 4.2, over 30 per cent of first-year undergraduate students on part-time degrees did not continue into the second year. The reasons for this are not clear but they should not be interpreted as necessarily implying failure on the part of the student. Motivations for study may have reflected a need to obtain knowledge or skills from a particular module. Part-time students tend to favour more vocational courses, with the most popular subjects (both undergraduate and postgraduate) being medicine and aligned subjects, business, and education. For many of these students, learning at university will be aligned with learning at work and the key outcomes are likely to be enhanced employability rather than new qualifications. As one of the quality-assurance interviewees commented, ‘higher education can help you develop professionally without going for a new qualification’ (Quality Assurance Agency, senior staff member, in-person interview).

In a recent report on flexible learning (Universities UK, 2018a), Universities UK placed considerable emphasis on the importance of part-time learning. The report brought together the perspectives of learners, providers, and employers. It identified three barriers to flexible learning: (i) a regulatory and funding system not designed to promote flexible ways of learning, especially for shorter and less intensive courses and for studies taken at older ages; (ii) the investment needed for institutions to scale up more flexible provision when there were uncertainties about future demand for it; and (iii) employers addressing future skills shortages through recruitment rather than through upskilling. The report made four recommendations:

- The apprenticeship levy needs to better support flexible learning.
- The post-18 education system must move towards providing more flexible course options and shorter courses.
- Government, education institutions and employers must work together to help learners progress from levels 2 and 3 study into levels 4, 5 and beyond.
- Greater government support should be given to higher education institutions wishing to innovate, scale up activity, or further develop systems for flexible learning.

Specifically, as far as part-time learning was concerned, the message seemed to be that the need was not so much for part-time equivalents of existing full-time courses but for innovative and collaborative learning opportunities that cut across organizational and cultural boundaries and would offer learners greater flexibility as to how, when, and what learning would be achieved. The recently announced introduction of a Lifelong Loan Entitlement by the UK Government could be an important step towards increasing flexibility, which would include more accessing of part-time study.

3.9. Finding the right pathways

There is considerable flexibility and diversity in the learning pathways available in and through UK higher education . But there are also complexities and difficulties for learners in finding the right pathways which will take them to their intended destinations. It is partly a difficulty for learners in making informed choices: in distinguishing between what is desirable and what is feasible. And this is also partly a problem of the balance between the vertical and horizontal differentiation of UK higher education: whether to choose something because it is supposed to be ‘better’ or because it is ‘different’. It does remain the case that *where* one studies can be more important than *what* one studies in determining future employment opportunities. That said, learning pathways are not just about future employability; they are about future identity, relationships and ‘life’.

However, important developments are occurring which may increase both the flexibility of learning pathways and the awareness of their potential uses and destinations. The Augar post-18 report contains a range of recommendations to increase the flexibility of learning pathways and to inform learners of their availability. But there are also developments occurring within UK higher education institutions which are providing opportunities for acquiring knowledge and credentials from different sources and using different learning methods to do so. Some of these are the focus of the next chapter.

Chapter 4. Flexible learning pathways in practice: Institutional perspectives

This chapter presents an analysis of FLPs at the institutional level. Information was collected from two contrasting English universities. One was the University of Birmingham, a well-established university in England's second-largest city. The university was one of England's Victorian universities, created during the nineteenth century. It has a strong research reputation and is a member of the elite Russell Group of universities. The other university was Teesside University, located in the north-east industrial town of Middlesbrough. It achieved university status in 1992, having previously existed as a polytechnic and, prior to that, as a college. It is a member of the University Alliance group and has a more local focus than Birmingham, recruiting a high proportion of its students from the Middlesbrough area whereas Birmingham recruits more nationally and internationally. Both universities have a broad curriculum covering most academic subjects and quite a wide range of vocational/professional fields.

Birmingham is organized into five colleges: Arts and Law; Engineering and Physical Science; Life and Environmental Science; Medical and Dental Sciences; and Social Sciences. It currently has 34,075 students, of whom 11,683 are postgraduates. Teesside is organized into five schools: Computing; Media and the Arts; Health and Social Care; Science, Engineering and Design; and Social Sciences, Humanities and Law, in addition to the Teesside University Business School. It also has five multi-disciplinary research institutes. Current student numbers are 18,576, of whom just 3,190 are postgraduates.

In addition to Birmingham and Teesside universities, this chapter of the report will also draw on some of the experiences of Exeter University and the Open University, institutions which are quite innovative in developing flexible learning pathways, and in the case of the Open University, collaboratively providing learning pathways in partnership with other institutions, nationally and internationally, through its separate FutureLearn institution.

Table 7 summarises the student enrolments at all four of these universities. All the universities provided courses across a wide range of different subjects and professional areas.

Table 7. Student enrolments at 4 UK universities

University	Full-time	Part-time	Undergraduate	Postgraduate	Totals
Birmingham	29,875	5,610	22,940	12,505	35,445
Teesside	11,875	6,790	15,480	3,190	18,665
Exeter	22,945	2,060	19,385	5,620	25,010
Open	580	121,775	113,045	9,315	122,360

Source: Adapted from Higher Education Statistics Agency, Higher Education Student Statistics: UK, 2018/19 (2020)

Table 8. Interviews at the institutional level

University	Topics	Interviewees	Type of interview
Birmingham	Admissions routes, cross-disciplinary curricula, year abroad, student pathways, organizational changes	A pro-vice chancellor & a deputy, Senior members of 3 faculties Support staff with responsibilities for quality assurance & collaboration, careers advice, & widening participation	Face-to-face group interviews Email exchanges with 2 students
Teesside	Admissions and flexible learning pathways through School of Social Sciences, Humanities & Law	Dean of School and 2 associate deans, 3 heads of department	Face-to-face
Exeter	Partnerships, online learning, part-time, degree apprenticeships, prior learning	5 senior professional support staff 4 senior academics Academic Dean for students	Written reports
Open	Online learning, MOOCs, partnerships, part-time lifelong learning	Mainly based on existing institutional documentation	2 face-to-face with Open University academics 4 online with FutureLearn staff

Source: Elaboration by the author

4.1. University of Birmingham

4.1.1. A traditional university with some diverse and innovative learning pathways

Birmingham was recommended as an interesting university for the project because of the considerable innovation and flexibility in its educational provision. Although an elite Russell Group university, it combines its research emphasis and traditional course provisions with a range of other provisions, offering students flexible pathways to different destinations. The university's website introduces the institution as: 'The global university at the heart of an ambitious city: persuasive, persistent and bold. We encourage and empower people to turn ingenuity into reality and make important things happen' (University of Birmingham, n. d.). There are distance-learning postgraduate courses in arts and law, engineering and physical sciences, life and environmental sciences, medical and dental sciences, and social sciences. In the social sciences, there is separate provision of professional development courses. There are also short courses, including the 24-week University of Birmingham Coding Boot Camp which provides training (weekends and evenings) in digital technologies geared to job opportunities for both current full-time students and for workers already employed in relevant fields.

There are online courses, including 19 MOOCs (massive open online courses). They are being offered as part of the Open University's FutureLearn programme as this is available to other universities for them to showcase their own MOOCs. Birmingham's MOOCs cover a wide range of subjects.

4.1.2. Organizational issues

The organizational context for these developments was discussed with a pro-vice-chancellor and a deputy. A 'new academic teaching year' (NATY) was going to be introduced in September 2020. Teaching would be organized in a modularized and semesterized structure⁶ that would facilitate increasing flexibility within the curriculum. The main aims of the NATY are to make better use of what was previously the 'summer term' (i.e. the post-Easter period), to balance out student (and staff) workloads across the academic year, to assess students close to the point of learning, and ensure equity in feedback on assessment arrangements. Furthermore, the NATY would increase opportunities for the development of cross-college/interdisciplinary programmes (including major/minor options), flexible degree apprenticeship programmes, part-time study options, and different, more accessible, student mobility options. The NATY would ensure that the university's structures would be agile enough to meet future demands for change, while retaining valued aspects of their traditional provision.

One of the senior academics interviewed explained:

I think the university does try to emphasize that it covers the whole academic range of subjects and has the expertise and willingness to support students in crossing subject boundaries. There have been various initiatives. A Widening Horizons module. Things put in place to try to get students moving across boundaries. (University of Birmingham, senior academic, in-person interview)

Widening Horizons is an opportunity for first-year undergraduates to take a module from outside their main discipline, enabling, for example, an engineering student to take a module in Japanese. An academic colleague observed that: 'At the institutional level, we have people, deans and heads of department, who do accept and try to support student mobility across subjects and departments', (University of Birmingham, senior academic, in-person interview)

⁶ Modules are how the curriculum is organized. Semesters are when the course modules take place.

Though it was also indicated that the mobility was mainly that of young undergraduates, with postgraduate studies more focused on specific subject fields or professional areas.

It was recognized that new organizational features would be needed to provide more flexible learning pathways for more students. Many new developments have already been agreed, the main ones being: (i) a simple framework for undergraduate study; (ii) facilitating credit transfer across the university; and (iii) a more efficient resource model. It was pointed out that ‘mixing’ required ‘matching’ if more students were going to be able to cross course boundaries. Thus, academic departments needed to have similar curriculum structures (e.g. length of modules and credits awarded) if students were to be able to cross departmental boundaries during their studies.

Implementing these new features will therefore require greater collaboration across the university and its different organizational units. As indicated previously, the university is organizationally structured into a set of colleges (called ‘faculties’ in many universities), each containing schools (called ‘departments’ in many universities). It is interesting to note that some recent innovations have required changes to this structure with a student undergraduate programme in the liberal arts sitting outside the five main colleges and an autonomous Liberal Arts and Natural Sciences unit established as a ‘mini-college’. The purpose of both initiatives was to facilitate greater interdisciplinarity and flexibility in the learning pathways available to undergraduate students. Some details of how this is being done are provided in a later subsection of this report on ‘A flexible learning experience’.

The new academic structure facilitates a greater number of learning pathways, available for all students on full-time undergraduate courses. But additionally, there are degree apprenticeship, distance learning, and continuing professional development courses. The undergraduate degree programmes are focused mainly on young full-time students who are resident during their studies on or near the university’s main campus. Ninety-nine per cent of Birmingham’s undergraduates are studying on full-time courses. However, postgraduate provision is more mixed, with mature students at different life stages often studying part-time. There are collaborations with employers and other organizations regionally who are providing teaching inputs to the university’s programmes. The majority of degree apprenticeships at Birmingham are for postgraduate students and linked directly to career-development needs.

There were also some international pathways for students, enabling them to have a year abroad as part of their studies. It was observed by one of the interviewees that ‘The year abroad in Australia and the USA allows students to take subjects they could never take in the UK because

they hadn't taken the relevant subjects at school' (University of Birmingham, senior administrator, in-person interview). For example, physics students could do courses in creative writing in the USA and Australia. The University of Birmingham also has a campus in Dubai.

There was also a view that there were cultural constraints within UK universities that limited the flexibilities available to students. Thus, one senior academic stated that 'We tend to have quite rigid mindsets in the UK. If you haven't done the 1st year course, you can't do the 2nd year course' (University of Birmingham, senior academic, in-person interview)

This could have implications for international students coming to Birmingham for a study period. Concerns were also expressed about how well international students were integrated within the university community. A problem was the regulatory constraints in the UK system. As a senior administrator commented, 'But there are so many regulatory constraints. Discipline timetables. What can be provided to students and when. The hierarchical nature of subjects' (University of Birmingham, senior administrator, in-person interview).

Concerning the last of the above points, there was a view that subjects differed in the vertical and horizontal hierarchical splits and divisions within the individual disciplines. What could be combined with what, and in what order, differed and this could affect students' journeys along their learning pathways. However, the university remains a 'global institution' with 6,500 international students currently studying there.

4.1.3. Admissions: Pathways to Birmingham University

There are alternative admissions pathways for different students. Some students can be made 'contextual offers' at the university, which take into account their social and educational backgrounds. Offers can be made to 'disadvantaged' students that require lower grades (around two grades lower) than the offers made to students from more socially and educationally advantaged backgrounds.

Another pathway into undergraduate degree courses at Birmingham is through further education and BTEC (Business and Technical Education Certificate) courses. These had previously contributed to four-year foundation degrees provided collaboratively with further education colleges and providing routes into degree courses which did not require the standard A-level school qualifications. However, arrangements were changing and there was now a need at the university for 'block' teaching, as well as for an 'enabling framework' to facilitate greater

collaboration between further and higher education in providing diverse learning opportunities for people at all life stages.⁷

A major flexible route into an undergraduate degree at the University of Birmingham is via the Pathways to Birmingham University programme. This provides school students in years 12 and 13 (i.e. immediately before university entry) with information and insight into higher education and professional career opportunities.

Pathways to Birmingham University widens participation by working with local schools and offering university places to their students with lower grades and/or postcode addresses from poorer areas. A lot of students who would not otherwise have obtained a place at the university gain admission by this route. For mature students without formal qualifications, accreditation of prior learning could enable entrance. The Pathways programme is an 18-month course that offers students opportunities to gain real insight into university study and possible careers resulting from it. Students can learn from student mentors, both graduates and academics. The programme also provides potential students with residentials, when they stay in university residences on campus, and these give them an insight into the full university experience. Students may also be eligible to receive Pathways to Birmingham financial support.

Some interviewed staff, however, did point out that there could be institutional risks from the widening of entry pathways as they could have negative reputational implications for the university. Widening participation needed to be quite discretionary and implemented in ways that did not undermine an institutional emphasis on ‘excellence’. It also needed to be part of quality-assurance checks, as observed by one staff member: ‘There always has to be some sort of effective check to ensure that academic standards are appropriate’ (University of Birmingham, staff member, in-person interview).

For students who had received contextualized offers of their places at the university, there was also recognition that they could have different needs as university students and that it was important to make sure that they did not fail and drop out of their courses, even if they did not perform as well as other students.

⁷ Further education colleges are independent education institutions offering some higher education and degree apprenticeships alongside other post-school courses and adult learning opportunities. It is the latter that are generally referred to as ‘further education’.

4.1.4. A flexible educational experience

An important and quite innovative example of flexible learning pathways at the university was based in Liberal Arts and Natural Sciences (LANS). It enabled students to cross subject boundaries in selecting their modules and provided them with a lot of flexibility in constructing a curriculum to meet their individual interests and needs. Students would take the same number of modules but could select them from a range of disciplines, providing them with a very wide choice of disciplinary and interdisciplinary combinations. These took the form of four-year degrees which included a year abroad and provided examples of the different ways in which students' higher education could cross subject, institutional, and national boundaries. The universities of Melbourne, Lund, Amsterdam, and Hong Kong had all been destinations for students' year abroad. Destinations were chosen by students to reflect one or more of the following considerations: (i) a need for subject-specific credits; (ii) personal interests (e.g. sport and culture); (iii) specific personal needs; and (iv) academic performance. The view was expressed by interviewed academic staff that 'the students come back as very different people'!

Regarding subject boundaries, examples of students' degrees awarded at graduation include a music major, an English literature major, a psychology and sports double major, a biology major, an economics and chemistry double major, and a philosophy major. But alongside their chosen major or joint major, LANS students could select from a wide range of additional study options.

As well as being able to choose from modules across the university based on their chosen major (or joint major), students in Liberal Arts and Natural Sciences also took some core modules designed to teach the advanced skills needed for an interdisciplinary degree in order for them to be 'able to explore innovative approaches to complex problems'. Thus, in their first year, students were able to take a 20-credit course, 'From Research to Policy', which aimed to transmit a set of transferable skills needed to 'help change the world'. This was taken alongside 100 credits from other subjects. In the second year, there was an interdisciplinary course in the first term on 'Truth and Post-Truth in the age of Big Data' and another in the second term on 'Real-World Problems'. There were also another 100 credits from other subjects. In the summer term there would be a study visit, to destinations such as Brussels. The third year was the year

abroad, spent at a university almost anywhere in the world (see examples above) where students continued their studies of their chosen major or joint major.⁸

Then, in the final year of the four-year course, students engaged in independent study for 40 of the required 120 final-year credits. Students could choose between: (i) an independent research project (40 or 20 credits); (ii) learning entrepreneurial skills (20 credits) in semester 1; and (iii) entrepreneurial start-ups (20 credits) in semester 2. For students who went for the independent research project and chose the single semester option, they would also need to take either an additional module in their major or one of the other independent study options listed above.

The Learning Entrepreneurial Skills option involved ‘working in teams, and through research, business-plan creation, and a pitch of the business plan’ (university prospectus), and aimed to support the student’s development as a:

- creative, enterprising and transformative thinker;
- skilful and technologically astute problem-solver;
- persuasive communicator;
- globally and locally aware citizen;
- confident, flexible lifelong learner; and
- resilient and dynamic leader.

The final-year experience of students taking independent study modules for the four-year degree in Liberal Arts and Natural Sciences was described in the university prospectus as follows:

Throughout your learning journey on these final year modules, you will benefit from the expertise and guidance of our external partners, which in 2017/18 included: international technology companies (IBM, Google), local start-up accelerators (Entrepreneurial Spark, Bizzinn), and investor firms (Midven, Blue Sky finance). (University prospectus).

The flexible learning pathways available to students on this Birmingham programme involved crossing many boundaries: academic/vocational, subjects, institutions, countries. And the University did place a lot of emphasis on ensuring that students received the information and advice needed to select the right pathways and reach their desired destinations. Each student

⁸ A ‘joint major’ was a joint degree in two subjects and not two degrees. Duration of study was no different between single and joint majors.

was allocated an advisor to assist in making the important choices from the diverse study opportunities available to them. As indicated in the next section, students did seem to feel that they were generally well enough informed to make their choices, although there were constraints as well.

The Liberal Arts and Natural Sciences degree programme also provided a cultural programme, with visits and events involving poets, writers, academics, and scientific specialists.

Students who entered the programme were faced with choices of many learning pathways that could involve journeys through different academic disciplines with different destinations and challenges in reaching them. Figure 3 and Figure 4 provide examples of the different pathways followed by students in the Liberal Arts and Natural Sciences programme.

Figure 3. Programme structure of a history major at Birmingham University

Year 1: Compulsory core / History / French / African Studies / International relations
Year 2: Compulsory core / History / African Studies
Year 3: Year abroad at Hong Kong University, History / Politics / Chinese Studies
Year 4: History / African Studies / Sociology / Spanish

Source: Adapted from University of Birmingham, n. d., Five examples of real student pathways in Natural Sciences and Liberal Arts and Sciences.

Figure 4. Programme structure of a BSc in natural sciences at Birmingham University

Year 1: Compulsory core / Biosciences / Psychology / Eng Literature / Art History / History
Year 2: Compulsory core / Biosciences / Film Studies / Gender Studies
Year 3: Year abroad at Lund University, Biosciences / Film Studies / Gender Studies
Year 4: Biosciences / French

Source: Adapted from University of Birmingham, n. d., Five examples of real student pathways in Natural Sciences and Liberal Arts and Sciences.

Students were broadly positive about their experiences on the LANS programme and the choices available to them, although some students interviewed for the project did indicate that they would have benefited from interdisciplinary experiences prior to their degree. Some student perspectives on the degree are provided in the next section.

There was a recognition and acceptance among interviewed faculty members that flexible pathways and the interdisciplinary experiences that these generally involved could also bring many challenges to the academic staff who were teaching them. Thus, one senior academic observed that:

On interdisciplinary modules, we're all aware of the difficulties and challenges. We take shared ownership of the modules. It's a very responsible and responsive process. We talk to the students a lot. We have focus groups with them. And we try to understand how things are working and whether and how things can be done better. (University of

Birmingham, faculty member of the School of Liberal Arts and Natural Sciences, in-person interview)

A colleague also observed that ‘We do a lot of work and reflection as a faculty group about what we are doing right and what we are not doing right. And what the students’ perceptions are’ (University of Birmingham, faculty member, LANS in-person interview).

4.1.5. Student perspectives on the LANS degree

Relevant and ‘flexible’ students were invited to present their thoughts on their experiences at Birmingham and how these linked to their motivations for studying and their plans for the future. Responses were invited to three broad questions:

1. What has been your experience of alternative entry routes and/or credit transfer arrangements that you have followed?
2. What has been your experience of flexible study inside this university?
3. Overall, what is working well and what could be improved? Do you have any plans for future learning pathways within or beyond higher education?

Because of the university closure in response to the coronavirus pandemic, only two responses were received to these questions, from female students in their early 20s, both of whom were studying on the Liberal Arts and Natural Sciences degree. One was taking modules in economics, international relations, ethics, and the environment. Her comments were mainly positive:

Overall, this kind of learning is working well as it is making me engage far more with what I learn as I have chosen all of it and usually have had to do additional admin to get onto courses unlike ‘standard’ course students. (University of Birmingham, LANS student 1, online interview)

Flexible pathways involved making choices and choices required information and support. This was not always easy to obtain:

Many staff will know that something is theoretically possible but not how best to go about it, have experience of it or know who to talk to about it, so it’s often a lengthy process of asking around, sending emails and trying to work out how best to approach any changes. (University of Birmingham, LANS student 1, online interview)

It was particularly challenging to arrange transfers between institutions:

Often credit transferring has been easy and straight-forward but there still remain very rigid structures in lots of degrees in the UK and so involving staff outside of my department in credit transfers/module changes, etc. has been more of a challenge. (University of Birmingham, LANS student 1, online interview)

What was clear from this student's comments was that flexible learning pathways transfer much of the responsibility for the selection of curriculum content and learning approaches from the university and academic staff to the individual student. This brings both benefits and challenges:

I have very few compulsory modules, which means I am able to work out what works best for me in content, teaching, and assessment style ... I'm unsure I could complete a degree if it was not somewhat flexible. I am pretty well-informed. What could be improved is the fact that sometimes the course requirements change while my cohort has been mid-way through the course ... I really think that any changes should apply only to those who are not already most of the way through the course. (University of Birmingham, LANS student 1, online interview)

The second student was studying an interesting combination of sports science, geography, biology, and nutrition. She was, at the time of the interview, in her year abroad, studying in Melbourne, Australia. She had an interesting set of previous jobs, including waitressing at a golf club and hotel and cricket coaching and umpiring, as well as employment at the Open (golf competition) in the UK and at the university as an ambassador and in hospitality. In addition, she had had work experience in physiotherapy and the police. All this suggested considerable 'flexibility'!

The student had clearly enjoyed her experiences of flexible learning at Birmingham:

My experience of flexible study at the University of Birmingham has been fantastic. I have loved learning to think in an interdisciplinary way. Being able to study a variety of disciplines has been enriching and I have learnt skills from each discipline that has helped me with the other. (University of Birmingham, LANS student 2, online interview)

We participate in a cultural programme as part of the course, where we go on trips. This includes exhibitions, theatre trips, sporting events, movie nights etc. It is a fantastic way to get everyone together and provoke fascinating conversations between us, all from different perspectives. I love to learn what other people are doing and their views on topics and things outside of university. (University of Birmingham, LANS student 2, online interview)

The student was a strong supporter of interdisciplinary learning and of flexible learning pathways as an effective means of achieving it. She had plans to do a master's degree in the area of environment and global health, which would be a mix of issues of food security and climate change and their impacts on diet and the consequences for health and sustainability.

The student's one concern was the need for flexible learning pathways to start earlier:

I do think that the value of flexible learning pathways could be taught sooner, as I had to do my own research and find the course myself. It is still more common to do single subjects which is still seen as the 'norm'. I think it should be encouraged because research is increasingly interdisciplinary and by studying different subjects, valuable skills are learnt which can be applied to other disciplines. (University of Birmingham, Focus group, LANS student 2, online interview)

At both the start and the destination of the learning pathway, flexibility and interdisciplinarity were increasingly important:

I do feel that interdisciplinary thinking and learning should be taught before higher education and there should be specific advice for students that apply for interdisciplinary courses, particularly as they become more common. (University of Birmingham, LANS student 2, online interview)

I also think that learning about the impact of interdisciplinary research should be taught earlier, since we are increasingly going to be living in a world of interdisciplinary research and jobs (I hope). I hope that by doing this and teaching this earlier, some of the barriers facing researchers when they are required to think in an interdisciplinary manner may be avoided and there may be less resistance to interdisciplinary work as well. (University of Birmingham, LANS student 2, online interview)

While these are only the thoughts of two students, it is interesting that they indicate something of the changes that are taking place in the higher education experience and their implications for the future of higher education.

Who decides?

The first student noted the possible transfer of authority and decision-making from the university to the student learner. More flexibility and more choices are available. In some ways, it fits well with the notion of increased consumerism in the ways in which UK higher education is organized. But the need for students to have access to the information to make their own decisions about their higher education experience together with the need for academic staff

themselves to be better informed about teaching and courses available outside of their immediate network do seem to be important messages.

Informed decisions?

The issue of information and advice to students as they embark on their learning pathways was emphasized by the second student. Students were having to make important decisions and it was important that they were informed decisions. The second student's impressive mix of different academic subjects and different work and leisure experiences was also an example of the ways in which flexible, and possibly quite innovative, learning outcomes can be achieved.

Two LANS graduates

In addition to the experiences provided by students who had been invited to submit their thoughts specifically for the FLP project, the university also provided some examples of statements sent to them by recent graduates in Liberal Arts and Natural Sciences (LANS). Here are two examples.

The first is from an English literature major graduate:

When I started my LANS degree, I never saw myself doing a master's. But here I am, having just completed an MPhil in Sociology at the University of Cambridge, a subject that I had never studied before I began my degree at Birmingham. But that's what LANS does – it allows you to surprise yourself by ruling nothing out ... I decided I wanted to continue studying after Birmingham while on my year abroad at Amsterdam University in the Netherlands. I found my flow, but, more importantly, I discovered the passion I had for topics in the social sciences that I had never considered studying before ... I am thinking about continuing onto a PhD, but not for a few years at least. For now, I'll be living and working, trying to find my place amongst it all. My ultimate advice for LANS students? Plough your own field, don't look back, don't be afraid to fail and have some fun. (University of Birmingham, LANS graduate, from university prospectus)

The second is from a biology major graduate:

I was an unusual Liberal Arts and Natural Sciences student, as from day one I was already declaring myself a biology major. The interdisciplinary nature of the degree seemed the perfect way to gain a firm knowledge of biology, whilst allowing me the chance to explore other subjects in depth that would otherwise be relegated to mere spare-time interests. A typical day at university for me would be attending a laboratory practical in which we were isolating and growing bioluminescent bacteria, and then heading to a seminar to argue about Gothic literature, or spending the afternoon in the

library reading up on Roy Lichtenstein's 'Crying Girl' for my next history of art essay. (University of Birmingham, LANS graduate student, from university prospectus)

Then, as soon as I finished my master's degree (at Cambridge), I ended moving to Paris to really commit to mastering the language. Recently, I found out that I successfully got a job working as a publishing editor for the Royal Society of Chemistry ... I'm amazed that I've managed to find a job that so perfectly combines my love of writing with my passion for science - it really is the LANS dream! (University of Birmingham, LANS graduate, from university prospectus)

The Liberal Arts and Natural Sciences degree programme at Birmingham University is an example of how flexible learning pathways can be used by students to construct their own futures and both acquire and transmit knowledge of value, both to their own future lives and to the societies of which they are part.

4.1.6. Enablers and preventers

Credit transfer for students between academic programmes at the University of Birmingham was not a problem but transfers across university boundaries were. There was no formal national system for credit transfer. And the autonomy of different institutions provided them with freedom to offer quite diverse programmes of study which could make it difficult for students to transfer between them. As a member of the Russell Group, a small number of student transfers between Birmingham and other member universities occurred. But outward transfers brought financial loss to the university, through loss of student fee income, so were not encouraged. Accreditation and recognition of qualifications by professional bodies have very defined criteria and these could also be a limiting factor to credit transfer between institutions.

Nationally, the new Office for Students was putting more emphasis on student recruitment and progression, and this could support the 'student journey' along the chosen pathways. However, the Birmingham staff who were interviewed felt that the OfS regulatory processes, although potentially enablers, were limited in their effectiveness due to their dependence on generally poor metrics. The aim of 'getting a good score' in the metrics could often displace the aim of 'providing a good education'.

As one staff member observed, 'We need to keep it as light touch as possible, try not to make it bureaucratic and burdensome' (University of Birmingham, senior administrator, in-person interview).

Another practical problem at the university was with timetables which could limit the range of modules that could be combined if teaching sessions overlapped.

One staff member observed that:

Managing timetables becomes incredibly time-consuming and complicated. There are an infinite number of learning pathways. And these do bring pressures to simplify and reduce potential routes that students can take. There can't be complete flexibility. (University of Birmingham, senior academic, in person interview)

Staff also noted the steep decline in the numbers of part-time students. They were now mainly mature students and some of the provision was by distance learning. Part-time provision had also become more centrally organized in terms of things such as timetables and hours required.

The view was also expressed by several staff that the university needed to do more to support and encourage staff to engage with students about the choices they could make and the flexibility that was available to them.

4.1.7. Managing flexible pathways

There were a few factors affecting the capacity of the university to continue to develop flexible learning pathways for its students. These were discussed with senior staff with responsibilities for collaborations with external bodies, careers support, widening participation, and quality assurance. The main points are summarised below.

Collaborations

There had been links with other universities in Birmingham and with further education providers and institutes of technology. There were shared curricula with some partners and relationships could be both competitive and collaborative when they were with other higher education providers. However, collaboration with further education colleges had reduced in recent years and was now mainly with University College Birmingham which offered a mix of higher and further education provision. There were also linkages with schools and with employers. With the latter, there were processes of 'contextualised recruitment' of graduates where qualifications achieved were contextualised with reference to the opportunities and supports which had been available to students. And there was some input from employers to the teaching of the courses in CPD (continuing professional development). With schools, Pathways to Birmingham University had a need to identify students from less advantaged backgrounds and factors, such as school attended and location, which could result in students being offered places requiring qualification grades that were below the normal requirements.

Important pathways included those organized in collaboration with further education providers. Foundation degrees were offered jointly, with students spending the initial year at the further education college and then two years at the university. Entry qualification requirements were lower than for standard university degrees. There was also some recruitment of students from further education colleges who had taken the more vocational BTEC courses rather than the academic subject A-levels. The university was quite selective in its recruitment of BTEC students and they were required to study for an additional year.

Careers

There was considerable emphasis on the importance of students acquiring transferable skills that would be relevant to their future employability. Extra-curricular activities could be valuable and help students to become better informed about career opportunities and the qualifications and skills that would be required in order to achieve them. A large percentage of jobs acquired by graduates had not required the possession of a degree in a particular subject and curriculum specialization was not the most important factor in determining employability.

Mature students

There were not many mature students on undergraduate courses at Birmingham. Much of the university's provision was campus-based and full-time, and this was generally not a very realistic possibility for mature students. And there was no part-time provision of undergraduate courses.

However, at postgraduate levels, there was much more mature student and part-time provision, much of it involving employer supports and engagement. For example, Wiley Publishers helped to provide an online degree faculty arm. There were master's degrees where students could 'roll on and roll off' and flexible payments were allowed. The mature student market was a local and domestic one and the university was investing in developing provision to meet its needs. These included CPD initiatives to support career changes at different life stages. There was also an Educational Enterprise Unit that offered online degrees and the possibility of PhDs that were job-linked. And there was the Trilogy Company which offered weekend provision of courses with quite flexible entry requirements, as well as contributing to the Coding Boot Camp referred to earlier.

Degree apprenticeships

There were opportunities for degree apprenticeships at both postgraduate and undergraduate levels. Companies funding degree apprenticeships included Vodaphone and Prime-Watch

Cooperatives in the field of computer science. Siemens funded apprenticeships in the field of civil engineering. In nursing, associate degrees were available through apprenticeship routes. With some apprenticeships there could be problems of finance and apprenticeships supported by charitable trusts tended to be more reliable, benefitting both the university and its students.

4.1.8. The innovation challenge

In conclusion, the University of Birmingham seemed to be successfully combining innovation and greater flexibility to its higher education provision with the maintenance of its reputation as one of the UK's leading traditional universities. Bringing in the new was not at the expense of protecting the old. Students taking the university's undergraduate courses were mostly studying full-time, mainly living away from home and coming to the university with very good qualifications and with clear expectations and aspirations. But there were now alternative entry routes into undergraduate courses, providing entry opportunities for potential students from a wider range of social backgrounds to enter, adapt, and change their learning pathways and to shape their future lives.

However, alongside the social equity agenda were important economic factors to do with changing employment needs and the kinds of graduates that would be needed in the longer-term future. Here, the flexibility available to students in terms of the subjects that could be combined, as well as the more transferable skills that could be acquired, was helping to provide a flexible, adaptable workforce that would meet long-term labour market requirements.

Several of the university staff who were interviewed placed emphasis both on the need for quality assurance for new and innovative provisions and on the importance of avoiding excessive regulatory controls which could actually damage innovation. One senior member of the university made the following points:

We do need to have the right processes in place for the new kinds of provision. It's all subject to quality checks at different levels. In my view, I don't think that quality assurance needs to be different for the new provision. At Birmingham, we take the view that all provision should be subject to the same quality-assurance processes. We're not creating loads of bureaucracy by promoting different models for different provision. We keep it as light touch as possible and try not to make it bureaucratic and burdensome. (University of Birmingham, senior academic staff member, in-person interview)

4.1.9. Conclusion

The University of Birmingham was undergoing considerable change and development. And the provision of diverse and flexible learning pathways for its students was a central part of that process. The flexibility increasingly available to students was bringing a transfer of decision-making from the university to the student in making the choices and decisions about their learning pathways. It is clearly important that these are fully informed decisions, and this brings challenges to students and the university. The university will have much to learn from its students, concerning their aims and aspirations, whether and how they achieve them, and the ways in which the university may have helped or hindered them along the learning journey.

The LANS programme discussed above was the most innovative and flexible provision currently available at the university but the changes currently being introduced across the whole university will bring further opportunities and challenges for the university and its students. There will be possibilities of growing interdisciplinarity, flexibility, and innovation across the whole university.

The aims of the forthcoming changes were described by one senior academic as:

Changes driven to bring the university into line with our competitors, to reduce the exam burden in May/June, enhance a more centralised timetable approach, and hopefully see greater student mobility options (incoming and outgoing). (University of Birmingham, senior academic, in-person interview)

Organizational changes of the kinds being introduced at this university will clearly provide students with greater opportunities to follow different learning pathways and cross disciplinary boundaries. However, at the same time, some of the changes might be reducing diversity in the ways in which curricula are delivered in order to meet the distinctive needs of particular disciplines. There might also be possibilities of losing some of the traditional disciplinary strengths of this long-established global university. Some staff did express concerns about the reputational risks innovation and flexibility could bring. As another senior member of the university commented, ‘Innovation can be risky, so we do need to help and check that no damaging mistakes are made’ (University of Birmingham, senior academic, in-person interview).

Universities can have much to lose but also much to gain by reviewing and changing the ways in which the curriculum is organized and offered to students. But changes are needed and universities do differ, both in the challenges they are facing and the ways in which they respond

to those challenges. Information about flexible learning pathways and the organizational challenges they can bring was provided to the project by another Russell Group university, the University of Exeter, and there were some similar themes and developments to those occurring at Birmingham, but also some differences. Exeter University has supplied the FLP project with information about flexible learning pathways into and through the university. This is presented below.

4.2. Exeter University

We draw on perspectives from some members of the University of Exeter on flexible learning pathways at their university. For reasons of time and resource, it was not practicable for the project to undertake a case study of the university, but Exeter is an innovative institution with some interesting new developments, and the contributions from staff members provide useful insights on them. The university has a range of learning initiatives that cover most of the pathway types which have been referred to in this report. The experience of the university is therefore extremely useful in indicating the workable strategies that are available to institutions in implementing their own flexible learning pathways.

The University of Exeter attained university status in 1955 as a result of a merger of four nineteenth-century colleges of education located in the south-west of England. It still has four campuses in the region, and is a member of the Russell Group of research-intensive universities. Student numbers have been growing in recent years, as shown in the table below.

Table 9. Student numbers at University of Exeter

	2015/16	2019/20	% increase
Undergraduate	17,131	19,764	15%
Postgraduate teaching	2,353	3,824	63%
Postgraduate research	1,461	1,625	15%
Total	20,945	25,263	21%

Source: Adapted from University of Exeter, n. d., Facts and Figures

The Exeter model for flexible learning comprises academic partnerships, accreditation of prior learning, part-time study, degree apprenticeships, flexible combined honours, liberal arts, Q-Step, and online distance learning, including an MA Education and massive open online courses (or MOOCs). Each of these is described by Exeter staff who have responsibilities for these learning pathways. First, there is an introduction to the university provided by the academic dean for students at Exeter, which emphasizes the importance to the university of achieving excellence and innovation in its teaching and in the student experience. In the following

sections, the quotations are the written contributions provided by Exeter University staff members, commencing with the Dean.

4.2.1. The Dean's Introduction

The University of Exeter has a Gold rating in the Teaching Excellence Framework,⁹ which takes into account our teaching, programmes, facilities, and the success of our students. We have an outstanding commitment to our students to ensure a positive outcome for all. We use business, industry, and professional experts in our teaching and the development of our programmes.

The Dean emphasized the significance of flexible learning pathways in achieving excellence in the teaching function and listed five separate strands to it:

Flexible learning pathways are an important element of delivery of our programmes, including:

- Combined Honours and Flexible Combined Honours programmes enabling students to combine modules from a number of different fields of study.
- Programmes with the opportunity to take up to a quarter of the studies outside the main area of study. This can be another academic subject area, languages or a vocational element.
- Part time study.
- Online distance learning programmes.
- Degree apprenticeship programmes.

Learning pathways at Exeter provided students with flexibility about what, how, and when they studied. The following sections describe examples provided by staff members of the flexible learning pathways available to students at the university. The first one is from a senior advisor for teaching quality assurance and enhancement and describes how Exeter's learning pathways can cross institutional boundaries and involve partnerships to develop and provide. Some partnerships also extend beyond educational institutions and entail engagement with organizations of different kinds.

⁹ The Teaching Excellence Framework (TEF) is the national system for quality assurance of teaching managed by the national Office for Students

4.2.2 Academic partnerships

All academic partnerships at the University of Exeter are programme specific and therefore none are defined as offering *fully* flexible learning pathways. However, the university does offer flexible learning modules through, for example, the [MSc Extreme Medicine](#) partnership. This partnership programme is delivered part-time and through a blend of delivery methods. The taught components of the core modules are short duration (2–4 day) intensive residential courses and involve distance learning, with keynote lectures, seminars, and group discussion, in addition to residential programmes.

A particularly interesting partnership went beyond the academic world of universities to join up with the professional world of film and drama at the London Film School:

Under our partnership arrangement with London Film School, postgraduate students have access to both the professional expertise, experience, and facilities of the London Film School, as well as the academic excellence of researchers and resources at the University of Exeter. The alliance has enabled the institutions to launch a number of initiatives, including the [MA International Film Business](#). During their first term at the University of Exeter, students explore key markets in the international film business; analysing themes relating to distribution and exhibition, the role of festivals, and the marketing of stars. During their second term at the London Film School, students explore innovative models being applied to the international film business as well as visiting the Berlinale (Berlin Film festival and European Film Market). The University of Exeter also offers transfers between institutions through [articulation agreements](#) with several international partners, whereby provision offered by another institution is deemed suitable preparation for a student to transfer onto a University of Exeter programme, usually at an advanced stage, e.g. direct entry to year two of an undergraduate degree.

Boundary crossing between universities and other organisations also occurs when learning acquired from other sources is recognized and integrated into learning processes within universities. A policy support officer from the university described the different kinds of students' prior learning and how this could be recognized and rewarded.

4.2.3 Accreditation of prior learning

Accreditation of prior learning [APL] allows students who enrol on award-bearing taught programmes of study to claim credit for previous learning. The previous learning must be relevant to the programme for which the student is applying and, if successful, the credit will count towards the programme of study. APL applications are accepted

for both undergraduate and postgraduate programmes; both home/EU and international students can apply for APL.

There were two main kinds of prior learning that could be recognized by the university:

When making an APL application, all evidence and supporting documentation must be submitted. There are two types of APL: Accreditation of Prior Certificated Learning [APCL] and Accreditation of Prior Experiential Learning [APEL]. APCL is where higher education credit gained from an alternative course at another university or from Exeter can be accepted as part of the course applied for at Exeter. APEL is where the student can demonstrate sufficient knowledge, understanding, and skills from experiential learning through recognition of prior work experience/non-certificated learning.

But there was also regulation and limits to the prior learning that could be recognized by the university:

Normally, the prior learning should have been completed within five years of the student's expected start date at Exeter. There is also a maximum amount of APL allowed towards the programme to be taken. Applications for APL where more than five years have elapsed and/or to exceed the maximum amount of credit permitted for APL must be submitted to the faculty dean who can grant exceptional approval.

Developments of this kind bring new quality-assurance requirements with them and new kinds of university professional roles in order to provide them. Such was the role of the policy support officer who also had a role in supporting the provision of part-time study opportunities. Here are her comments about part-time studies at the university.

4.2.4 Part-time study

Some of the university's undergraduate degree programmes are potentially available by part-time study; this can be dependent on the particular programme and the timetabling arrangements. A particular feature of the Flexible Combined Honours programmes is its availability to students who wish to study part-time. A three-year undergraduate degree would typically take six years to complete by part-time study.

Part-time study was also available for postgraduate courses and this could take a variety of different forms, as described by the policy support officer:

A full-time master's programme is normally of 11–12 months duration, with the part-time study programmes lasting roughly twice as long. In addition, there are degrees which can be studied in a modular format to enable students to continue with their

career. As well as part-time options for taught degrees, the university is offering an increasing number of master's degrees via distance learning, making use of web technology and requiring little or no attendance on campus. Some programmes are delivered via block teaching; intensive 1–2 week bursts of on-campus lectures, seminars, and activities which can fit in more easily around the student's working life.

4.2.5 Degree apprenticeships

The University of Exeter has developed a number of degree apprenticeship programmes since their launch in 2017/18. Developing undergraduate and postgraduate programmes in collaboration with leading UK companies, innovations have included diverse delivery models including block delivery, masterclasses, blended learning, online interactive seminars, workplace mentors, and the extensive use of work-based learning and reflective practice. The university has invested in a central e-Learning team to support the rapid development of online learning materials using a variety of platforms.

Details of four degree apprenticeships were then described. They provide examples of the different kinds of flexible pathways for different kinds of students that can be made available through apprenticeships, incorporating workplace learning and blended learning, which can be followed at different paces of study.

Digital Technology Solutions BSc

This programme was the first to launch, in 2016/17. Aimed at school leavers and new talent for business, the degree was written against the national standard set out by the Institute for Apprenticeships. It includes block delivery on campus, with online interactive seminars taking place weekly, when learners access the programme from the workplace locations across England. High-quality online learning materials, including video content, have been developed for every module.

This BSc in Digital Technology Solutions is an interesting example of an FLP that delivers blended learning (a combination of both online and face-to-face courses) and adapts the pace of study to their students. Indeed, since it can be difficult for workers to regularly find time away from the office, block delivery is a convenient way to ensure that working people continue their study.

Civil Engineering B.Eng

This programme commenced in 2017/18 with strong support from Laing O Rourke, EDF and Bouygues. The programme runs as a B.Eng with two pathways, Site Management (Levels 4 & 6) and Consultancy (Level 6 only), both co-taught in the main.

This programme has termly five-day block delivery to enable the apprentices to access the same learning materials as students on the equivalent full-time degree.

It is noticeable that this Civil Engineering B.Eng has a strong articulation with labour market actors and has also arranged its curriculum to favour apprenticeships. This ensures a smooth and flexible transition within the labour market.

Financial Services

Working with industry partners JP Morgan, UBS, and Bloomberg, the university has developed a suite of flexible Level 4 and 6 programmes enabling participants to study towards professional qualifications as well as a BSc in Applied Finance, with flexible jump-on and jump-off points facilitated by extensive APCL and APEL processes.

The University of Exeter displays interesting features of RPL in its admission process where the APEL procedure enables applicants to have their informal and non-formal education experiences recognized.

Master's programmes: Senior Leader (MBA) and Research Scientist (Data Science MSc)

Programmes to upskill existing employees have been developed by the Business School and College of Engineering, Mathematics and Physical Sciences. Offering multiple start dates in London or Exeter, short block delivery, expert masterclasses, and extensive reflective practice and work-based projects, these highly flexible programmes are very popular with employers and learners.

These two master's programmes targeting mature learners and working adults adapted the pace of study to the profile of their students and provide a lot of flexibility.

Exeter's degree apprenticeships exhibited considerable flexibility in their approaches to learning and to achieving strong relevance to employment needs and opportunities. The needs of both employers and their employees were being met by what was clearly a successful and innovative development. These examples show the different forms of flexibility that universities need to provide for different kinds of students in different work settings and at different career stages.

As well as learning pathways that took the learner beyond the walls of the university, there were also new learning pathways provided within the university's own walls. A main one was Flexible Combined Honours. This is described below by the Director of Flexible Combined Honours and was organizationally located in the Faculty of Humanities. It shares some of the features of Birmingham's Liberal Arts and Natural Sciences programme.

4.2.6 Flexible Combined Honours

The Flexible Combined Honours (FCH) degree allows students to study a combination of two or three subjects from across the university that are not offered as existing combined honours degrees. FCH also offers a number of thematic 'pathways' (Sustainability, Mediterranean Studies, etc.) that combine modules from different departments; these are studied in combination with one or two other subjects. Options that include a language are particularly popular, and many students choose to include a year studying or working abroad as part of their degree.

As with the Birmingham LANS programme, Flexible Combined Honours at Exeter attracted students with particular interests and ambitions:

The FCH programme thus attracts students who have a particular career aspiration in mind, and those who want to pursue existing interests in different fields, sometimes quite divergent (e.g. mathematics and drama). Most subjects require a certain amount of compulsory core content to be studied at first and second-year levels, alongside some optional modules. In their final year, students are invited to choose an interdisciplinary independent study module that allows them to combine their fields in a research project of their own devising.

FCH at Exeter attracts high-achieving students who are usually highly motivated, and in the period 2013 to 2018, 88 per cent of students achieved a 2:1 or above, with an average award mark of 65. The programme is overseen by a directorial team including the director, deputies at Streatham and Penryn campuses, and a full-time administrator; further support to students is offered by individual subject co-ordinators.

But also, as in Birmingham, Liberal Arts provided flexible learning pathways for students to experience learning opportunities beyond their main academic discipline. How this was achieved is described below by Exeter's Director of Liberal Arts.

4.2.7 Liberal Arts

The BA Liberal Arts at Exeter is a programme which offers a diverse learning experience rooted in interdisciplinarity. In terms of flexible learning, it is a degree which has (from 2020) over 20 major 'routes', the majority of which correspond to single academic disciplines, though some correspond to interdisciplinary fields (e.g. marketing and management). The students are given agency through their ability to shape their studies based on a common core; the common core modules include a first-year module – Being Human in the Modern World – which offers insights into a wide range of topics in the humanities and social sciences, taught week by week by subject specialists.

Liberal Arts was again challenging the controls of traditional disciplinary boundaries in higher education, enabling members of different academic ‘tribes’ (Becher, 1989) to meet and engage with each other.

In the second year, the Think Tank module requires flexibility and adaptability as the students apply their skills of research and critical analysis developed in different disciplines in a response to a challenge set by an external ‘stakeholder’.

As the Liberal Arts Director indicated, liberal arts degrees were providing learners with experiences of choices and flexibility which would be a preparation for the choices and flexibility they would experience for the rest of their lives:

In addition, students undertake a language module in the first year whilst also having the opportunity to develop quantitative skills in common with other Exeter students through Q-Step routes. In the final year, students may take a dissertation in their major subject, or may choose to pursue a dissertation across two subjects – a Liberal Arts dissertation – anchored in an interdisciplinary question and allowing flexibility of focus.

Alongside their studies at all levels is the optionality intrinsic to the course, where students can pick modules from across the wider university in subjects of interest. This provides a foundation for a humanities and social sciences graduate with ‘habits of learning’ to facilitate flexible learning through the life course, and active citizenship in wider society.

Moving on to the social sciences, a senior staff member from the College of Social Sciences and International Studies described how the University’s Q-Step Centre enables social science undergraduates to combine their social science subject studies with quantitative methods and work placements to give them practical experience.

4.2.8 Q-Step

The Exeter Q-Step Centre offers three BSc programmes, in Sociology, Criminology and Politics & International Relations. These courses are designed to allow students to study their substantive social science subject while introducing them to quantitative methods. Students on these programmes are encouraged to gain practical experience by undertaking a work placement and are supported with a bursary to help facilitate this. The Q-Step Centre has developed an extensive network of employers who are able to offer placement opportunities, but students can also source their own placement to tailor it to their interests or career ambitions.

Q-Step is an interesting example of the ways in which academic knowledge can be combined with work-related knowledge and skills through collaborative partnerships between universities and employers.

There were also learning pathways which included quantitative methods available to students on all undergraduate programmes. Students were provided with two options for studying and gaining credits for quantitative methods.

In addition to the core Q-Step programmes, students on any undergraduate programme at Exeter are able to access the same quantitative methods training by taking the Proficiency in Applied Data Analysis [University of Exeter, n. d., *Proficiency in Applied Data Analysis*]. This enables students to build the methods training into their existing degree programme by taking 60 credits of Q-Step modules.

For students who may not have the timetable space to commit to the full 60 credits of the proficiency, the Q-Step Centre also delivers a Pathway in Data Analytics [University of Exeter, n. d., *What is Pathways to Data Analytics?*]. This gives students at any level, studying any subject, the opportunity to undertake extra-curricular data analysis training at either an introductory or intermediate level. Once they have completed the training, which is around 15 hours of contact time, they also have the opportunity to undertake a one-week work placement to practice what they have learnt in a professional setting.

Flexible learning pathways enable students to change directions at different stages of their journeys. An example is provided below. It concerns a mature student who entered the university via the admissions route of an Access to HE Diploma. Intending to study sociology, the student took some Q-Step modules and ended up working as a software engineer, which was not at all the destination she initially planned.

A mature student came to study sociology at Exeter in 2014 having completed an Access to HE Diploma. She discovered the Q-Step modules, and took up the option of the Proficiency in Applied Data Analysis. She also took the opportunity to do several work placements. Having successfully completed her degree with the proficiency, she then completed a Master's in Advanced Quantitative Methods and is now working as a software engineer at the ONS. This is a very different career path to the one she imagined she might follow when she first came to university, but the proficiency allowed her to follow her interests and gain the data expertise initially without having to change programme.

As with all the universities that were visited for the UNESCO FLP project in England, Exeter was developing online distance learning courses, many involving partnerships with other

organizations, including FutureLearn, an organization described in a later section of this chapter. The university's strategy and progress for implementing online digital learning provision is described by a team leader for Teaching Quality Assurance and Enhancement.

4.2.9 Online distance learning programmes

To meet a range of flexible learning requirements, the university is developing a number of digital programmes within colleges and in partnership with global specialists in online higher education, including Keypath Education and FutureLearn (specifically for MOOCs). The ambition is to have a suite of online provision across all of the university's key themes in Environment and Sustainability, Digital World, Culture and Heritage, Health and Wellbeing, Built Environment.

As with many UK universities, online learning at Exeter is being introduced, particularly for postgraduate courses. The challenge is to offer both flexibility and quality, the latter largely measured in terms of comparability with traditional face-to-face learning. The following two paragraphs describe how this is being achieved at Exeter:

Current online postgraduate taught programmes offer students all of the same quality materials, teaching, and assessment that on-campus students receive, and delivered through high-quality technology and a network of academics and student advisers. Online programmes are designed flexibly, allowing students to study (and pay) on a module by module basis, over a one or two-year period and to fit alongside work and family commitments. Programmes use a carousel structure with up to six intakes per annum so students can join a programme when it suits them and if needed interrupt after completing a module to return to study at a later date.

The university also recognises prior learning for online study and offers the same scholarship and student loan facilities to students which includes accepting late payments after enrolment if an online student has applied to study and been confirmed (but not received) a student loan payment. Once students are registered, student support advisors are assigned to transition students to study, build personal relationships and identify at-risk learners to maximise retention.

An interesting example of an online postgraduate course is Exeter's MA Education (online), providing flexibility for students about how, what, when and where to study. It is described below by the Programme Director of the Graduate School of Education.

MA Education (online)

The MA Education (online) programme at the University of Exeter provides students with a number of different flexible learning pathways.

To begin with, the MA Ed (online) programme offers students flexibility in relation to module choice. In addition to the completion of four core modules, students can select two modules from a range of specialist pathways: Educational Leadership; Special Educational Needs (SEN); and Language and Literacy. Students can choose to pursue a specialist award (e.g. MA Education: SEN) by completing two modules in the relevant specialist pathway or can adopt a mix and match approach and exit with a generic MA Education award.

Second, as the programme is delivered online, it enables students from all over the world and in different time zones, to choose when, where and how they will learn. As a part-time distance learning programme, it does not rely on synchronous student engagement but rather gives students the flexibility to manage their learning around work and family commitments. Most of our students are full-time teachers; senior leaders; and education consultants. Thus, whilst modules are designed to be followed on a week-by-week basis, students can determine the working pattern that best suits their individual contexts.

Finally, not only does the programme provide flexibility in both the mode of delivery and timing of learning opportunities, it also offers students a degree of choice. In addition to the completion of weekly core activities, students can select from a number of optional enrichment and extension tasks designed to further their understanding of the topic being studied and to consider its implications for their own professional practice. Moreover, for their final module, students design and undertake a small-scale research study specific to their particular research interests and professional contexts. Thus, the flexibility embedded in the programme design enables us to personalize the learning by providing an element of choice and making learning relevant to students' professional background.

While the university genuinely attempts to ensure comparability between its online courses and their traditional campus-based face-to-face equivalents, it is pretty clear that they are providing learners with a different experience. This is not necessarily a worse experience, and for the mostly experienced professional educationists with full-time jobs, the online MA experience is likely to be the best, and for many the only, option.

In this chapter's section on the UK's Open University, the creation and development of FutureLearn is a major focus. Exeter is one of over 80 universities around the world that are partners with FutureLearn, using the technical support provided by FutureLearn to offer online

courses to provide flexible learning pathways to learners of all ages in different locations and with different learning goals. Exeter's provision of MOOCs (massive open online courses) is described by the university head of e-learning.

Massive open online courses

Exeter was an early adopter of massive open online courses (MOOCs) in the UK, being one of the first 10 institutions to partner with FutureLearn, the OU-led challenger platform to Coursera and EdEx. Since 2014, the university has developed 21 courses on the FutureLearn platform which have run multiple times resulting in over 225,000 enrolments. The courses cover a wide range of subjects and are generally linked to areas of research excellence or project outcomes; they run for between 2–6 weeks and focus on a key question based on the topic. A full list of the MOOCs currently offered by Exeter is available on FutureLearn's website [FutureLearn, n. d., *University of Exeter*]. A number of these have been developed with external organizations providing additional learning engagement post MOOC completion.

Learners on these courses come from a wide range of backgrounds and have very different motivations for engaging with the courses. The age distribution of MOOC learners is not the same as those applying for undergraduate/postgraduate study at Exeter with predominantly older participants undertaking the course for personal interest more generally than career progression or gaining qualification – only 1.7 per cent of engaged learners have currently paid to receive a certificate of completion.

A number of Exeter MOOCs are designed to offer learning progression, exploring a subject in greater depth (e.g. climate science courses). One MOOC has also been aligned to a taught module for undergraduate students, with the students encouraged to participate with the MOOC to join the wider community of practice. A key benefit of MOOCs is that there is no compulsion for learners to have to actively engage with the course in full, allowing learners the flexibility to engage at a level that suits them personally. There is still a high drop-out rate for MOOCs (on average 50% of registered learners never start the course), but those that engage report that they find the experience excellent and like the short course format and quality of the materials being provided.

The arrival of MOOCs is an important example of the diversity needed as higher education expands to meet the different learning needs and aspirations of diverse learners located in diverse contexts, with diverse motivations for study. The figure of only 1.7 per cent of MOOC learners paying to receive a certificate of completion is remarkable, suggesting that most of the learners already have all the qualifications that they need and/or they are studying to achieve

objectives that have nothing to do with certification. It is not unlike reading a book! There is no certificate ‘on completion’!

4.2.10. Some Exeter conclusions on the impacts of FLPs

There is a lot happening at the University of Exeter, much of it highly relevant to the themes of the Flexible Learning Pathways project. Below the senior quality and standards adviser at the university summarises the vision, aims, and achievements of the university over the last few years.

The University of Exeter’s vision is of a diverse learning community, and flexible learning pathways are an important element in ensuring this vision is delivered successfully. The university continues to see increasing diversification in the ways in which students are choosing to engage with learning and has reported a rise in the proportion of taught modules digitally captured for students to re-watch on demand, for example.

Since launching in 2016 with nine degree apprentices on a single degree apprenticeship programme, the university now has several hundred students enrolled across multiple apprenticeships, including IT, Management, Civil Engineering, and Financial Services. The impacts of the degree apprenticeship programmes can be seen through their significant growth and their partnerships with industry, including several international organizations as well as many regional SMEs. In 2019, in excess of 360 degree apprenticeship places were delivered and the university worked to plan provision worth £27 million as part of a five-year business plan. The university also successfully won a range of contracts, including a multi-million pound contract with JP Morgan.

At the end of 2019, the university was awarded an Institute of Technology, developing its growing provision of employer-focused degree apprenticeships and working with other regional providers and employers to help bridge skills gaps in the economy and provide the technical training that both students and employers require, in a flexible manner.

The University of Exeter also believes its international connections and collaborations are fundamental in opening up exciting flexible learning opportunities for students. The university currently has approximately 1,400 European students enrolled and over recent years it has consistently ranked in the top 10 in the UK for outbound student mobility. It has forged numerous academic partnerships with universities across Europe and in December 2019 became the first UK university to join the Venice International University Consortium, an association of 20 of the world’s top universities where

programmes are drawn up collegially together, across disciplines, continents, languages, and cultures. Students encounter a truly intercultural and blended learning experience.

Outside of Europe, the university recently developed a unique partnership with the Office of the Thai Judiciary (OTJ) which saw the University of Exeter deliver a part-time postgraduate Certificate of Contemporary Legal Practice in Bangkok, designed to support the professional development of those working in the Thai judicial system. The certificate (aimed at Thai judges and judicial officials) is delivered by Exeter Law School staff in Bangkok. Upon successful completion, Thai judges and judicial officials are given the opportunity to travel to Exeter and complete the Exeter LLM [Master of Laws degree] in a shortened timeframe. Nineteen students embarked in September 2019 and, more recently, the OTJ have asked to extend the partnership for a further year as well as committing to fully fund two PhD scholarships.

International collaborations have also seen a recent growth in research funding and the University of Exeter is currently 14th in the UK for EU Horizon funding and in 2020 obtained in excess of €90m for over 150 projects – 88 of which were with EU partners. In 2018, three in four of all its co-authored research publications involved a collaboration with an international partner.

Through its people, partnerships, and innovative flexible learning pathways, the University of Exeter is working hard to challenge traditional thinking and defy conventional boundaries to achieve its vision of a diverse learning community within an education-research ecosystem.

4.2.11 Messages from Birmingham and Exeter

What are universities for? In today's globalised knowledge societies, the answer has to be 'a lot of different things' and Exeter is clearly attempting to provide this. There are challenges in doing so. Returning to the Durkheim quotation (Durkheim, in Clark, 1981), there is no doubt at all that both Birmingham and Exeter universities remain 'recognizable' as universities but there are inevitably challenges in the extent to which 'unity and diversity' can successfully be combined. The university staff who provided the information on Exeter occupied a range of different professional roles at the university, several of which would not have existed a few years ago. New developments can require new people to do new things. But the 'new things' must not be at the expense of the 'old things' which continue to provide, in Durkheim's terms, the 'identity' of the university as a 'living thing'.

The case of Exeter University is certainly a good example of the diversities that can be involved in providing flexible learning pathways in higher education. They require connections between what is provided and how it is provided. They reflect localized disciplinary contexts at the levels of basic units at departmental and faculty levels as well as the larger institutional culture and strategy. They require a mix of diverse staff expertise and commitments, bringing academic, administrative, and other professional skills and orientations together in order to manage and deliver the learning pathways for students.

Alongside the flexible learning pathways provided for students, the developments taking place in both Birmingham and Exeter universities indicate the need for and importance of flexible career pathways in higher education institutions. The diversity and flexibility within today's universities brings new professional support needs for students and a breaking down of traditional categories of 'academic' and 'administrative' staff. The teaching function within universities is changing with the arrival nearly everywhere of online teaching and learning, increasing cross-disciplinary learning pathways for students, engagements with employers and local communities, all of which brings a need for new professional roles and activities within universities. Students also need information and advice before deciding which pathways to follow, and well-informed supportive staff are needed to provide it. Both Birmingham and Exeter universities were certainly attempting to develop new areas of professional support for both students and academic staff.

All of the above raise interesting questions for the organization and management of universities in providing flexible learning pathways. They have implications for staff training and development, for the adoption of new technologies, for the use of resources and for the institution's priorities. They also require institutional quality-assurance processes that can both ensure the quality and standards of innovative new provisions while protecting the quality and standards of existing provisions. As far as we can tell, both Birmingham and Exeter are doing this, no doubt, again in Durkheim's terms, by fully retaining their 'identity' while 'bending and adapting' to meet changing societal needs and contexts.

However, different universities face different societal needs and contexts, many of which are also changing, and most of which require institutions to 'bend and adapt' to respond to them. We now move on to our second of the project's university case studies, Teesside University, located in Middlesbrough within the Tees Valley of the north-east of England.

4.3. Teesside University

A modern university providing learning pathways for its community and beyond

The case study at Teesside University was mainly focused on the School of Social Sciences, Humanities and Law, which is a medium-sized academic unit with around 3,500 enrolled students on a range of courses from extended degrees (UK Level 3) through to PhD and other doctoral awards. The school contains a vibrant mix of academic and professional programmes that come administratively under the following three departments: Education and Social Work, Humanities and Social Sciences, and Psychology. For the purposes of this case study, interviews were conducted with the Dean of the School, the Associate Dean for Marketing and Recruitment, the Associate Dean for Learning and Teaching, the Head of Department of Education and Social Work, the Head of Department of Psychology, and the Head of Department of Humanities and Social Sciences.

The interviews focused on the needs of the students – their admissions, their learning pathways and destinations – and on the challenges that the university faced in meeting those needs. Before delving into the findings, a description of the institutional context follows.

4.3.1. Institutional context

Teesside is a modern university located in the North East of England within the sub-region of the Tees Valley. With almost 20,000 students, it provides a vibrant learning environment for students from across the globe whilst simultaneously fulfilling a core role as a higher education provider for its local communities in the Tees Valley and the wider North East. It is one of five higher education institutions (HEIs) in the North East. One of these, Durham University, is ancient, while another, Newcastle University, is a nineteenth-century civic institution. Three are modern, post-1992 institutions: Northumbria University, University of Sunderland, and Teesside University. All five institutions take pride in playing important educational and economic roles in the region, as well as nationally and internationally. Within the North East of England there are three combined authorities; groupings of local government administrations, known as local authorities, that work together to provide core services for their communities.

Teesside University is the only higher education institution that is located within the Tees Valley Combined Authority (TVCA) and one of only a very small number of HEIs that find themselves in this position in the UK. The remaining four North East institutions are part of the much larger North East Local Economic Partnership (NELEP). It is its location and well-

established strategic relationship that allow Teesside to play a pivotal role in the economic development of its sub-region by operating as an ‘anchor institution’; an institution firmly rooted in its communities of geography and interest and in a unique position to support business, the public and third sectors, as well as individuals accessing higher education. This embedded partnership allows the university to operate as an integral part of workforce planning in the sub-region in key areas such as health and social care but also in terms of enterprise initiatives such as Digital City, while also driving economic development through programmes such as the European Regional Development Fund. Further, the university’s acquisition of the Middlesbrough Institute of Modern Art (MIMA) has given it further prominence within the local community; it is now used as a core part of the institution’s engagement strategy.

The university is central to the economic strategy of the combined authority and has played a key role in shaping plans for post-COVID-19 recovery. Further, a recent independent report highlighted that, in 2018/19, the university:

- earned a total income of £145 million;
- had a net expenditure of £142 million;
- employed a total of 1,614 staff;
- had a total of 18,667 students.

The university contributes additional wealth to local, regional, and national economies, as measured by gross value added (GVA). It is estimated that this contributes a total of £141 million GVA per annum. If the longer-term persistent benefits arising from some of these knowledge transfer activities are included, the total cumulative GVA is £208 million. The combined human capital impact is estimated to be £1.4 billion (Teesside University, 2020).

The main campus is located in the town of Middlesbrough, with a smaller satellite in Darlington, some 15 miles to the west. The lack of a metropolitan location has sometimes been posited as a challenge for the university, particularly given the location of one other modern institution in the nearby ‘destination’ city of Newcastle upon Tyne. Throughout its history as a polytechnic and, later, a post-1992 University, Teesside has risen to this challenge in a variety of ways. First, as noted, it educates large numbers of local students, with over 70 per cent recruited from the North East of England. Second, like many modern universities, it has a good track record in the delivery of professional programmes in areas such as nursing, policing, and social work. Following significant changes to how part-time study is funded in the UK in the

early years of the last decade, much of the university's part-time provision has been moved to local further education colleges under a higher education business partnership, now known as Teesside University College Partnership (TUCP). This consists of a wide range of provision, including foundation degree programmes and certificates in higher education. Many of these are designed with progression to top-up programmes delivered at the main university campus as an objective.

The university's Vice Chancellor, Professor Paul Croney, recently circulated a letter to staff at the university, setting out strategic priorities for the years ahead. It contained the following paragraph:

The landscape of our sector has changed over recent years, we are subject to additional regulation and multiple assessments, all of which deliver metrics used to define quality and success. The approach does not appreciate, recognise or celebrate the diversity of our sector. Teesside University is about much more than numbers and should not be defined by the limitations of these systems. We add value to society through economic impact, cultural engagement, community outreach, applied research and job creation. We actively transform lives, this is our mission and we will not compromise on this.
(Paul Croney, Teesside University, Vice Chancellor, letter to the staff)

Applying this mission to the School of Social Sciences, Humanities and Law, the Dean's 'paradigm' for the Teesside context was that it was an institution that is always ready to respond to the market and changing demands of both the sector and the economy and workforce, as evidenced by recent success in approving, securing contracts for and delivering the recent UK government's higher degree apprenticeships courses. This further reflects a long tradition of provision that is geared towards vocational and professional programmes. The institution also has a reputation for its ability to diversify income, for example through the generation of business and enterprise activity, as defined by and reported in the Higher Education Business and Community Interaction Survey (HEBCIS). This includes incubation of start-up businesses and the delivery of high-quality continuing professional development, as well as consultancy activity.

These changes have taken place in an increasingly challenging environment for higher education in the UK, with increased competition following the introduction of the Higher Education and Research Act in 2017, combined with a demographic dip that has reduced the number of 18-year-old applicants for university places. The government's deregulation of student numbers had resulted in expansion among some of the more elite universities, reducing

the numbers of students available for places at other universities. Teesside had to reduce the options available to students, although the provision of an initial foundation year did provide students with options and choices for their later studies.

4.3.2. The students

Around 70 per cent of students were local, although there were also over 1,500 international students, mainly studying business and law, as well as international campuses in Delhi and Kuala Lumpur. Most students were studying full-time although there were also significant numbers of part-time and online students. Within the School for Social Sciences, Humanities and Law, there were about 300 part-time students, mainly mature students. Many of the mature students had come from further education colleges and/or business partnerships and were often taking four-year foundation degrees.

Across the university, there is an interesting age profile of students, with 32.1 per cent over the age of 30. This compares with 13.7 per cent at Birmingham and 19.7 per cent nationally (see Annex 5). This inevitably affects the learning pathways that are needed and is probably the main reason for the high numbers of part-time students at the university. Table 10 shows that 4,384 of the 6,791 part-time students were taking non-degree courses, making them the second-largest student grouping, after the 9,561 full-time students taking first degrees, in the university’s student population.

Table 10. Student by level of study at Teesside University (2018/19)

	Full-time	Part-time	Total
1 st degree	9,561	943	10,504
Non-degree	594	4,384	4,978
Postgraduate	1,721	1,494	3,185
Total	11,879	6,791	18,667

Source: Reprinted from Teesside University, n. d., University Statistics

Of the non-degree part-time students, 1,209 of them were studying health-related professions and were predominantly staff already working in the health and social care sector. A further 1,328 of them were studying on distance learning engineering Higher National Diploma (HND) courses, while 452 were studying the same courses either on the university campus or at one of the university’s partner colleges. Some 259 students were studying education certificate courses, and 826 of the non-degree part-time students were studying ‘small bites’ of learning through the university’s summer/winter programme.

This substantial part of the university's education programme was a good example of how universities can engage with their local communities, offering mainly work-related learning pathways to local residents at different life stages. Part-time study could be successfully combined with work and domestic duties of various kinds. Students taking these courses were seeking new skills and knowledge relevant to their current careers. They were not necessarily seeking or wanting new qualifications and some of the students already possessed degrees. It is important that national policy recognizes this as an important function for many universities that may not be captured by assessments based on completion rates and similar metrics.

A high proportion of the university's degree courses were also available as full-time and part-time studies and thus facilitated flexibility in study patterns, recruiting students at different life stages and with different commitments outside the university.

The School of Social Sciences, Law and Humanities itself has a large (taught) postgraduate population with a flexible mix of full-time and part-time enrolments. Part-time study was quite flexible and could cut across academic years. Many students, full-time or part-time, also had part-time jobs.

Students were provided with significant flexibility to allow them to manage their studies. As one of the department heads explained:

Students are allowed to interrupt their studies for six months. They are also able to 'transfer out'. Some students taking a criminology/psychology degree switch to criminology. But they can take their credits with them to other subject areas. And full-time students can take their credits and switch to part-time studies. It is allowed to 'cross courses'. All students are provided with a personal tutor who can advise them on the options and pathways available to them. (Teesside University, head of department, in-person interview)

Students were also encouraged to gain work experience relevant to their courses and career intentions. Thus, criminology students went to prisons; psychology students went to hospitals; there was an in-house law clinic; and there was a module that required students to go out and apply their knowledge and skills. Thus, large numbers of students were given access to work experience opportunities. This is embedded in many of the courses not only for the purpose of enrichment, but to enhance employability. The latter could be a challenge for graduates who are more likely than the UK national average to remain in the region in which they have studied.

Most of the university's graduates were in paid work soon after leaving university: 56.9 per cent had full-time jobs, 12 per cent had part-time jobs, 5.5 per cent were combining work with further study, while 20 per cent were still studying, mainly full-time.

As previously indicated, Teesside University has large numbers of adult students studying part-time. This reflects the university's strong relationships with its local communities and key organizations within them. To take one important example, the School of Social Sciences, Humanities and Law has a long history of partnerships with responsible authorities, including police forces both regionally but also from elsewhere in the UK. These were cemented in the 2000s when the school was a trailblazer in delivering Level 4 and 5 foundation courses for Cleveland and West Mercia police forces under a mode of co-funding that supported workforce development whilst providing HE-level qualifications. With changes to university fees for full and part-time students that took place in the UK in the early years of the last decade, this funding declined and forces moved away from the foundation degree model. However, following the introduction of higher and degree apprenticeships nationally, the school has worked in partnership with Cleveland Police to develop the Police Constable Degree Apprenticeships, a truly integrated approach whereby all new recruits to Cleveland Police embark on a three-year degree course with the School of Social Sciences, Humanities and Law. The course combines academic and work-based learning in an integrated way to meet the needs of newly trained police officers, their colleagues and the communities they serve.

Thus, students at Teesside are participating in higher education at different life stages and many of them are combining their academic learning with workplace learning. In so doing, the university is becoming increasingly integrated within the 'knowledge society'.

4.3.4. Admissions

Teesside University invests significant resource and energy in recruiting students in a competitive higher education landscape in the North East of England and beyond. In the school, each student cohort was a mixture of 18 to 19-year-olds with A-levels, some with Level 3 qualifications, and students of a wide range of ages with different levels of qualification, and from a wide range of different courses and institutions. A lot of students were recruited from 16 further education colleges in the region. Some of the TUCP further education college partners act as feeders in this respect.

The university made offers based on UCAS points.¹⁰ The university also provided an Access to Higher Education diploma, run jointly with local further education colleges. At the further education college, students would study three or four different disciplines and receive training in study skills. Then students would embark on a four-year foundation degree, with year 1 at Level 3, then progression to obtain a degree after four years, although some highly motivated students could get there in three. Admission to foundation degrees was flexible, especially for mature students, and would take account of the student's experience, essays, and participation in summer and winter schools, for which they gained credits. Most students had jobs or were engaged in voluntary work and/or community engagement. For some applicants, BTECs were a common route to an application for higher education.

The school has also begun to offer degree apprenticeship programmes, most notably the Police Constable Degree Apprenticeship in collaboration with Cleveland Police, as described above. Degree-apprenticeship students were in employment, combining work and study in an integrated way, and with their employers paying their university fees.

4.3.4. Flexible pathways into the university

Concerns about the implications of the current higher education market changes were expressed by some of the interviewees who acknowledged that it was a key part of the university's strategy to be entrepreneurial and responsive to a rapidly changing marketplace, hence the introduction of, for example, the four year foundation degrees referred to above. The 'foundation year allowed more flexible entry for undergraduate students who may not have the normal entry qualifications to join a traditional three-year undergraduate programme. The foundation degrees typically offer a more generic learning experience in the foundation year, for example across the social sciences and humanities quite broadly, before allowing progression to the first year of a three-year undergraduate programme in, for example, criminology or history. All of this was to be welcomed. The concerns expressed by some staff did not reflect opposition to new developments of this sort. But it was considered important to maintain a balance between numbers entering higher education through these new pathways and the numbers coming through the more traditional entry routes of the increasingly competitive student market.

Although foundation years are well established in some parts of the university, they have only commenced in Social Sciences, Humanities and Law in the past two academic years. Recruitment has been robust for these flexible learning pathways that have allowed access to

¹⁰ University Central Admissions Scheme: points based on A-level grades achieved.

higher education for cohorts of students who would not previously have been eligible. As is to be expected, this has not come without challenges, and it has been both desirable and necessary to build in a large study-skills component to these foundation years to support progression to Level 4. Innovative developments such as these were becoming increasingly necessary as higher education became more competitive following the government's deregulation of student numbers at universities coupled with the demographic dip. And innovation could often benefit from collaboration between institutions and, as in this case, between the higher and further education sectors.

As noted above, under the auspices of the institution's strategic Teesside University College Partnership (TUCP) there are a variety of opportunities for applicants to begin their studies within the local further education colleges. These cover a range of courses, some vocational, many of which began with a discrete foundation degree containing Levels 4 and 5 with the opportunity to progress to the University to complete Level 6. This acted as a flexible entry route to higher education for learners who might not have the requisite entry qualifications for direct entry to Level 4. These programmes are often delivered in partnership with employers to allow students the opportunity to combine work and study. Following changes to the funding of part-time study from 2012 onwards, TUCP and programmes such as foundation degrees allowed for the creation of more innovative learning pathways that provided opportunities for a diverse demographic of learners. The recent report of the Independent Commission on the College of the Future has highlighted the work of TUCP as an example of good practice in the sectors and the transformative potential of HE in FE. The report describes TUCP as follows:

The Teesside University College Partnership (TUCP) delivers a shared vision of driving regional economic growth and productivity through providing seamless pathways of employer-responsive education and training across the Tees Valley. Through working in genuine partnership, Teesside University, Darlington College, Hartlepool College, Stockton Riverside College and Redcar & Cleveland College have established an innovative networked approach to the delivery of higher-level skills, ensuring that the location and nature of provision directly responds to regional industry needs. This is underpinned by shared strategic decision-making through the TUCP Board, comprised of senior representatives from all partners. (Independent Commission on the College of the Future, 2020: 17)

Here, the Commission highlights the truly embedded role the university has within the colleges and how this positively impacts on the delivery of higher-level skills in the sub-region.

4.3.5. Flexible pathways through the university

The School for Social Sciences, Humanities and Law contains quite a wide range of subjects and learning pathways for students. But decisions are generally made at the school level. Schools at Teesside University have considerable autonomy regarding programmes of study, including links with further education colleges and the recognition of prior learning. However, some interviewed staff felt that the further education links were mainly just a ‘marketing’ arrangement and were generally limited to the foundation year.

As indicated above, students are allowed to interrupt their studies for six months and they are able to ‘transfer out’. But they are also able to take their credits with them to other subject areas. It is possible to ‘cross courses’. It is also possible to change modes of study. For example, some students taking Police Studies take credits and switch from full-time to part-time courses. There was considerable flexibility available to students.

There was also an increase in online learning (e.g. education courses in Early Childhood) and this was needed in large part because of a decline in the local student market. Teacher education had a lot of online learners, with 60 credits required to get the basic postgraduate teaching qualification (the postgraduate certificate of education, PGCE) and 100 credits required to get a master’s degree, and with some students in China and India. An online MA course on Traumatized Childhood had been very popular with students.

One of the department heads emphasized that:

There are new routes becoming available to students leading to different learning destinations. Also, many firms are now doing their own teaching and it is becoming increasingly important for educators to respond to employer needs, although in fields such as teacher education, professional bodies tend to limit the extent of change and innovation that is possible. (Teesside University, head of department, in-person interview)

Courses in psychology were among those that were constrained by a national professional body, the British Psychological Society, although there were postgraduate conversion courses into the profession for students who did not possess a first degree in psychology. This is an example of a programme where accreditation with a professional body limits the diversity of curricula between institutions and therefore makes transfer of credit between institutions easier, although this occurred relatively infrequently in any given academic year.

Modularity in the curriculum provided students with opportunities for greater selectivity and flexibility. though the view was expressed that the Teesside system was quite a controlled and integrated approach. There was often a danger that greater choice and flexibility for students could be at the expense of integration in the curriculum and the quality of the learning experience.

Psychology courses had a good employment record, with many students continuing their studies into taught postgraduate studies at both master's and doctoral level. There was a work-based learning module at Teesside and there was both part-time and full-time study provision. Part-time courses could provide greater flexibility, including flexibility of cost. There was also potential for more distance learning. Although there were considerable possibilities for greater innovation, respondents felt that this had to be balanced with provision of established programmes and disciplines that provided recognizable career pathways.

4.3.6. Enablers and preventers of flexible offerings: What, when, where, and how?

The School of Social Sciences, Humanities and Law and Teesside University generally are characterized by a flexible learning offer designed to meet the needs of the particular student demographic as well as the workforce demands of regional, national, and international employers. This offer includes foundation years, the Teesside University College Partnership, and degree apprenticeships, all running alongside a traditional offer of undergraduate and postgraduate (research and taught) programmes.

There was a range of factors which differentiated the provision of education and the kinds of learning pathways that were available in different subject fields. Where there was professional-body regulation and clearly defined pathway destinations for students taking particular subjects, this limited the options available for both university and students in the choices that could be made.

However, if there were constraints about 'what' needed to be learned, there could still be flexibility about 'where' 'when' and 'how' it was learned. Online learning, work-based learning, full-time and part-time courses were all being offered to students at Teesside University's School for Social Sciences, Humanities and Law.

4.3.7. Conclusion

Because of its focus mainly on the work of a single school, the Teesside University case study was more limited than the Birmingham case study. Nevertheless, there was plenty happening in the university in the provision of flexible learning pathways for quite a different profile of

students than those at Birmingham. More of the Teesside students were local, more were studying part-time courses, and there was a much wider age range. Pathways crossed institutional boundaries with further education, there were strong links with local employers, and community engagement was a strong feature of the university's mission.

Because the Teesside case study was compiled during the Coronavirus pandemic, it was not possible to gain information directly from students and, generally, data collection was more limited than what had been planned. There remain interesting questions about the transformational effects of the university on the community, where most of the students and graduates reside, with its graduates in local employment, often in fields relevant to the subjects of their degrees. Alongside the strong engagement with its local community, the university was also developing its global links with the introduction of online learning as well as its overseas campuses.

Online learning has been central to the educational experience provided by the Open University for many years. And, through its FutureLearn company established in 2012, this is becoming increasingly global. The flexible learning pathways available through the Open University and FutureLearn are the focus of the next section.

4.4. The Open University and FutureLearn

The Open University has just had its fiftieth anniversary. It was established at the end of the 1960s as a university that was 'open to all'. It was a route into and through higher education for adults who, for a variety of reasons, had not entered higher education after leaving school. Students at the Open University studied part-time, typically combining their higher education with paid employment and/or domestic responsibilities. There were no entry requirements for most undergraduate courses. Today, there are currently over 120,000 part-time undergraduate students at The Open University together over 50,000 part-time postgraduates.

4.4.1. Introduction

The Open University has always provided distance learning, initially through programmes on BBC television and printed materials, supported by tutors locally. However, for many years now, courses have been delivered to students online, although students are also assigned tutors whom they may meet face-to-face.

The university provides a very broad curriculum, offering students a wide choice of what and when to study. It is the largest provider of part-time higher education courses across the UK. There are no entry requirements for most undergraduate courses although there are some work-

based programmes with entry requirements designated by professional bodies. Time to completion for an Open University bachelor's degree is typically between six and seven years, although in recent years there has been a growing number of younger students who select to study with the Open University on an almost full-time basis with a much faster pathway to completion of their degree.

Open University degrees cover a wide range of subject fields, whereas part-time degree courses at other institutions tend to be quite vocational and linked to work requirements of the students. Key features of the Open University are its open entry and distance learning. It is the only university that operates across the four UK nations of England, Scotland, Wales, and Northern Ireland. In its most recent strategic plan, the university defines itself in terms of a vision and a flexible approach that 'supports people of all ages and backgrounds to study and achieve their potential' (Open University, 2020: 3).

4.4.2 Part-time study provision meeting specific needs

Of its 174,000 current students, more than 24,000 are disabled, 1,800 are in prisons or other secure environments, and 1,000 students are taking degree apprenticeships. The university states its mission as 'open to people, places, methods and ideas', its vision as 'to reach more students with life-changing learning that meets their needs and enriches society' and its values as 'to achieve our vision and mission, we remain true to a clearly defined set of values' by being 'inclusive', 'innovative', and 'responsive' (Open University, 2020: 7).

Open University part-time students typically take one module at a time and the average pass rate per module is 67.3 percent, with a return rate (to another module) of 63.4 per cent. The postgraduate pass rate is 77.4 per cent. Regarding their entry qualifications on admission to undergraduate courses, 23 per cent already have higher education qualifications, 42 per cent have traditional entry qualifications to higher education, and only 35 per cent lack traditional entry qualifications. Thus, the starting point on an Open University learning pathway differs considerably among students.

Changes to part-time study at the Open University in the last 10 years are listed in the strategic plan as: a reduction of nearly 50 per cent in the numbers of students; a proportionately younger student population (average age 28); higher intensity of study (1 in 5 students effectively studying full-time); a decline in postgraduate student numbers of 37 per cent; a considerable growth in numbers of students taking degree apprenticeships; and an increase in module completion rates.

Though part-time student numbers have been falling at the Open University, they have been falling at even greater rates at other higher education institutions. This may partly reflect the increasing fee levels.

However, as well as the fees effect on student demand, the rise in higher education participation rates more generally, with around 50 per cent of young adults entering higher education soon after leaving school, the numbers of unqualified adults needing and wanting to obtain an undergraduate degree at later life stages has reduced considerably. Thus, the Open University has needed to adapt. There have been cost savings resulting from a closure of the university's regional centres and a greater use of online communication. And as the above statistics indicate, many of its students are re-entering higher education at a later life stage and with new learning needs. Their Open University flexible learning pathway will be the second or even the third higher education pathway for many students.

4.4.3 E-learning through FutureLearn

There have also been some important and innovative developments in what is being offered. The major one has been the creation in 2012 of FutureLearn, a social learning platform. It provides online learning internationally with over 170 UK and international partners, both universities and other organizations. It offers short courses and online degrees, together with microcredentials and study programmes which enable students to follow flexible learning pathways, acquiring certificates and degrees from different sources and at different times. FutureLearn's purpose is to transform access to education.

FutureLearn has 13 million people signed up worldwide. It uses design, technology, and partnerships to create 'enjoyable, credible and flexible online courses', as well as undergraduate and postgraduate degrees, that improve working lives.

There have been approximately 3,000 online short courses on the FutureLearn platform since it launched, with 620 short courses available to start as of 1 June 2020. Examples include:

- Inside IELTS: Preparing for the Test with the Experts, IELTS, British Council, Cambridge Assessment English, three hours per week for five weeks.
- Digital Skills: Social Media, Accenture, one hour per week for two weeks.
- Build Communication Skills at Work, The Institute of Coding and the University of Leeds, two hours per week for two weeks.

- COVID-19: Tackling the Novel Coronavirus, LHSTM, four hours per week for three weeks.
- Understanding Fashion: From Business to Culture, IFM, three hours per week for four weeks.
- Understanding ADHD: Current Research and Practice, King's College London, two hours per week for four weeks.
- Introduction to Cyber Security, the Open University, three hours per week for eight weeks.
- Managing Mental Health and Stress, Coventry, three hours per week for two weeks.
- Food and Mood: Improving Mental Health through Diet and Nutrition, Deakin University, three hours per week for three weeks.
- How to Teach Online: Providing Continuity for Students, FutureLearn, two hours per week for three weeks.

But FutureLearn also provides online degrees with opportunities to 'study flexibly online as you build to a degree' (FutureLearn, n. d., *Online Degrees from Top Global Universities*). Online degrees are currently provided via FutureLearn by the Open University, Anglia Ruskin University, University of Glasgow, Coventry University, University of Newcastle, and in Australia by Deakin University and Murdoch University. Additionally, Deakin and Coventry universities offer a joint degree, as do Coventry University and the Institute of Coding.

FutureLearn partners with over a quarter of the world's top universities, as well as leading organizations such as Accenture, the British Council, CIPD, Raspberry Pi and Health Education England. FutureLearn is also involved in government-backed initiatives to address skills gaps such as the Institute of Coding, the National Centre for Computing Education, and the Skills Toolkit from the Department for Education.

The provision of study programmes with microcredentials leading to degrees or other certificated learning is the major innovation providing flexible learning pathways for students. FutureLearn describes the aims of its programmes and microcredentials as follows:

Microcredentials and programmes allow you to pursue further study in a specialised field. Created by leading universities, microcredentials are professional credentials designed for you to build in-demand career skills. Programmes allow you to deepen your understanding of a subject, with the

opportunity to obtain a professional or academic credential. (FutureLearn, n. d., *Microcredentials and programmes*)

Microcredentials were available at both postgraduate and undergraduate levels. Examples include:

- At postgraduate level – from Glasgow University: a programme in *Change Management*.
- At undergraduate level – from the Open University: a programme in *Teacher Training: embedding Mental Health in the Curriculum*.

Links between learning and employment needs are emphasized by FutureLearn for much of its provision:

Our online credentials are designed to upskill you for work in rapidly-growing industries, without the time and cost commitment of a full degree. You can earn academic credit to use towards a degree or they can be used as an independent certificate. (FutureLearn, n. d., *Microcredentials and programmes*)

FutureLearn is providing flexible learning pathways to many destinations. They may involve long or short journeys. They may link to current or future employment needs or they may not connect directly to work considerations at all. Many of the pathways can be followed at no cost to the learner.

4.4.4 E-learning through OpenLearn

In addition to FutureLearn, the Open University provides over 1,000 free short courses via OpenLearn. These typically involve 24 hours of study time, but this can be spread over long or short periods, according to the needs of the learner. Most of them are accessed online although there is at least one that is regularly presented on BBC Radio.¹¹ Some courses are ‘badged’, with badges awarded for completing all sections of a course and passing the assessments. Examples include:

- Microgravity: living on the international space station;
- The Scottish Parliament and Law Making.

The first of these is part of the Science, Maths and Technology set of courses and the second is part of the Society, Politics and Law set. Other courses are grouped within the following sets:

¹¹ ‘Thinking Allowed’, a weekly social science programme on BBC Radio 4.

- Health, Sports and Psychology,
- Education and Development,
- History and the Arts,
- Languages,
- Money and Business,
- Nature and Environment.

Courses are available free to anyone, though learners are recommended to obtain a learning profile (also free) from OpenLearn: ‘Anyone can learn for free on OpenLearn, but signing up will give you access to your personal learning profile and record of achievements that you earn while you study’ (OpenLearn, n. d., *Blended Learning*).

OpenLearn offers ‘education for life’ which might be ‘skills for work’, ‘family and relationships’, ‘health and wellbeing’ or ‘money and finances’. Just taking a few examples from the social sciences, study modules include:

- Smart cities,
- From Brexit to the break-up of Britain,
- How arguments are constructed and used in the social sciences,
- Introduction to the social sciences,
- Understanding criminology.

For some students, OpenLearn pathways will take them onto Open University degree courses. Some of the modules, for example the last two in the above list, are clearly designed for that purpose. However, the Open University, in part through FutureLearn and OpenLearn, offers a huge range of flexible learning pathways for people of all ages heading in all sorts of directions. Learners can acquire degrees and other credentials if they need them or just the new knowledge and skills that they are seeking.

Another feature of the Open University’s contribution to the provision of flexible learning pathways lies in its partnership approach with other organizations (including many universities) through FutureLearn. This provides a useful reminder that often things can be achieved more easily through collaboration than they can through competition! The large number of free courses and learning opportunities made available provides a good reminder of the continued

importance of the ‘public good’ in higher education, as well as and an example of how they can be combined with the business skills required of higher education institutions today.

New information technologies facilitate, and arguably require, innovations and changes to existing educational practices. Combining the best of the old with the best of the new will be one of the challenges facing higher education in the UK and worldwide.

4.4.5 MOOCs

Much of the Open University’s provision through OpenLearn and FutureLearn can be classified as MOOCs, ‘Massive Open Online Courses’, which generally require no entry qualifications, are often free to learners but typically lead to no qualification. MOOCs were also part of the course provisions at Birmingham and Exeter universities, both of which used FutureLearn. A MOOC is defined in Wikipedia as:

A massive open online course is an online course aimed at unlimited participation and open access via the web. In addition to traditional course materials, such as filmed lectures, readings, and problem sets, many MOOCs provide interactive courses with user forums or social media discussions to support community interactions among students, professors and teaching assistants (TAs) as well as immediate feedback to quick quizzes and assignments. (UNESCO-UNEVOC, n.d.)

The benefits of MOOCs are listed in Wikipedia as:

- (i) Improving access to higher education;
- (ii) Providing affordable alternatives to formal education;
- (iii) Sustainable development goals;
- (iv) Offering a flexible learning schedule;
- (v) Online collaboration.

There are several global providers of MOOCs and they undoubtedly do provide flexible learning pathways in a wide range of fields. The destination reached at the end of the pathway, however, will generally not be a qualification. Though some providers, including FutureLearn, do sometimes provide options for the certification of learning achieved via a MOOC. However, the certification comes at a price to be paid by the learner. And with the certification of learning come issues of quality and standards and the processes needed to assess and recognize them. However, in the case of FutureLearn and OpenLearn, the ownership of MOOCs by established

reputable universities goes a long way to ensuring the quality of provision and the value and recognition of the certificates.

4.4.6 Some conclusions on the Open University and FutureLearn

The developments at the Open University and FutureLearn could be quite central to the future of higher education, not only nationally in the UK but also globally as higher education generally exploits the opportunities provided by online learning. But the Open University is important not just because of its pioneering use of new technologies in delivering learning. It is important because of the emphasis on lifelong learning involving part-time study. In our world of 'knowledge societies', people need to update their knowledge, obtain new knowledge as they change career directions, and update their communications skills and confidence in our rapidly changing world. Preparing for unknown futures!

The collaborative nature of the FutureLearn enterprise is also interesting and important, with universities entering into partnerships with other universities as well as with other organizations, nationally and internationally. Collaboration needs to replace competition between institutions as a major feature of expanded universal higher education systems. Collaboration can be a key enabler. Competition can be a key preventer!

However, competition does not disappear, and a challenge for the Open University will come from the adoption of online distance learning much more widely across the higher education sector. This will bring threats but also opportunities for the Open University, and many of the opportunities will come from collaboration and partnerships with potential competitors. And this is already happening in FutureLearn.

Flexible learning pathways can enable learners to visit different places and meet different people. And there are major learning opportunities that can arise from experiencing difference and diversity. The point has been powerfully made in a recent article by the Open University Vice Chancellor calling for less selectivity in UK higher education. He argues that:

Not only would this achieve more diverse and inclusive student communities in every university, it would also likely improve educational outcomes. (Blackman, 2020: 37).

The Vice Chancellor goes on to describe how:

Students with different abilities, identities and experiences learning together creates valuable opportunities for peer learning but also encourages mutual understanding and inclusion. It is also likely to enhance complex learning, given evidence that critical

thinking and complex problem solving are more successfully developed in cognitively diverse groups. (ibid.:40)

The Open University is frequently referred to as the UK's only comprehensive university. But the arrival of FutureLearn does provide prospects and opportunities for creating a more comprehensive higher education system. Peer learning across social and cultural divides remains challenging for education provided solely by online learning methods but emphasis on 'blended learning', which combines online with face-to-face, can help to achieve the social and cultural benefits of genuinely comprehensive higher education. Social equity, as well as learning, would be enhanced.

As we have indicated, UK higher education is a large and diverse system. The focus in this chapter has been on four universities, selected not because they were typical and representative of the larger system but because they were doing interesting and innovative things in the provision of flexible learning pathways for students and society. The next chapter will consider some of the messages coming from these universities for higher education more generally.

Chapter 5. Comparative analysis of institutional policies and practices for flexible learning pathways

There is considerable diversity among the institutional providers of higher education in the UK. Expansion has reached Trow's 'universal' phase of higher education although, arguably, the elite and mass phases have not disappeared. There is diversity in the experience being offered to students and there is diversity among the students themselves, in terms of age, social background, aspirations and ambitions, time available for study, and abilities. And different issues can be measured and assessed in different ways. For instance, Exeter and Birmingham both used the level of parental higher education, the time spent on care, and the POLAR (participation of local areas) classification as eligibility criteria for widening participation. However, they used a different proxy to identify socially disadvantaged students: the first looked at free school meals while the latter referred to the household income (Boliver *et al*, 2017). Therefore, as we have already emphasised, the institutional cases considered in the previous chapter should not be taken as necessarily typical of the whole UK higher education sector. They were different from each other, but the differences are part of a wider differentiation of the higher education sector as a whole.

However, there were some common strands among the issues that emerged from the institutional case studies of Birmingham and Teesside. One was the importance of the level of analysis for decision-making about a university's learning pathways. In the Teesside School of Social Sciences, Humanities and Law, there were differences reflecting the distinctive features of particular departments and subject areas. Different subjects had different needs, reflecting their academic content, the academic/vocational balance, and the interests and needs of the students who had chosen them. Some subjects could be studied in combination quite easily whereas combined study would be quite challenging for other subjects.

At Birmingham, where we had a wider perspective on the whole institution, there was an interesting combination of traditional subject-based undergraduate degrees together with the broader, flexible learning pathways available in Liberal Arts and Natural Sciences, which itself contained a lot of diversity. In that degree programme, it was still possible for students to focus their education mainly on a single subject – to 'learn a lot about a little' – or to spread their studies across a range of subject areas – to 'learn a little about a lot'. And, indeed, by selecting major/minor combinations of modules, students could both learn 'a little about a lot' and 'a lot about a little'. And potentially there was work-based learning, acquisition of transferable skills

and other sources of knowledge and skills that could be added to the learning pathway experience.

Turning to the lifelong learning context, since they attract and recruit a different student body, the two universities did seem to be providing different things for their learners (Annex 5). At Birmingham, the majority of undergraduate students tended to be young well-qualified school leavers, although the Pathways to Birmingham University programme did seem to be succeeding in providing alternative entry routes, though the destination of the routes was always a full-time undergraduate degree at the Birmingham campus. Teesside, in comparison, had a significant number of students who were studying part-time, many of them mature students entering higher education from a range of pathways, sometimes involving an initial further education experience before entry to the university itself. Exeter was the university with the highest proportion of young school leavers as its students and the lowest proportion of students over the age of 30. The Open University was, of course, at the opposite extreme with almost 60 per cent of its students over 30 and only just over 6 per cent of students aged 20 or under.

Still regarding the student body, the four universities have a different ethnic and social composition (see Annex 5). Teesside and Exeter Universities both recruit mainly white students; respectively 88.6 per cent and 88/8 per cent, while the national average was 74.5 per cent in 2018/19. However, their students come from different socio-economic backgrounds. Indeed, in 2018/19, 30.6 per cent of Teesside University's young students were from the first quintile of the POLAR 4 classification¹², compared with only 6 per cent of Exeter's young students. Teesside University was well above the average share of quintile 1 students enrolled in a British university (11.6 per cent), while Exeter was below it (see Annex 7). It is also important to notice that Birmingham has a large share of Asian students.

Concerning the flexible learning pathways at the University of Exeter, there was an impressive list of flexible combined honours degrees, part-time study, online distance learning programmes, and degree apprenticeships. There were some academic partnerships with other organizations, usually programme specific and employing mixed methods of delivery. Credits for prior learning were available for both certificated learning and experiential learning. Several full-time degrees were also available on a part-time basis, generally taking twice as long to complete. And there were degree apprenticeships at both undergraduate and

¹² As described in Chapter 2, the POLAR classification is a UK-wide measure of educational disadvantage based on participation rates in higher education. It is divided into five quartiles where quartile 1 refers to the 'most disadvantaged' and quartile 5 refers to the 'most advantaged'.

postgraduate levels, in partnership with other organizations and often employing diverse delivery methods.

The growth of online learning across higher education can be found almost everywhere. However, the innovations of the Open University and FutureLearn, with their blending of new technology, partnerships and the public good, in order to develop and deliver flexible learning pathways across the globe, could be a major way forward for lifelong learning and higher education more generally. Online learning already seems to be a way to make higher education more inclusive. Indeed, the Open University is the British university with the highest rate of students known to have a disability (22.3 per cent). The online learning offered by the Open University seems to provide them with a flexible solution that meets their needs. This indicates that the type of learning delivery has a strong impact on the participation of disabled students

Flexibility in the certification of learning as well as in its delivery is particularly important and FutureLearn appears to be already successfully crossing all of the important boundaries of and within the globalized knowledge society. By working in partnership with leading well-established universities in a wide range of countries, it is doing so without compromising on the quality and standards of traditional higher education. In fact, its innovative developments are enhancing the quality and standards that can be achieved.

Looking at the UK higher education sector as a whole, one important aspect of flexibility is in the duration of study required for a bachelor's degree, ranging from the two-year 'accelerated' degrees, through the three- or four-year standard full-time degrees, to the five or six years with the Open University or some other part-time providers. However, apart from the 'further' into 'higher' education entry route and the developing work of FutureLearn, there seemed to be relatively little cross-institutional transfer in students' learning pathways in the UK.

A key factor limiting the availability of cross-institutional transfers for students in the UK higher education system is the relative autonomy of individual institutions and the competitive relationships between institutions resulting from this. A feature of the autonomy factor is that it permits, and indeed encourages, differences in the curriculum offers of different institutions. A sociology student at one institution may be required to study a significant amount of economics alongside his or her sociology whereas this may not be a requirement, or only optional, at another institution. But this could make it difficult for a student to transfer between the two institutions if he or she had not acquired an area of knowledge possessed by other students at the new institution. In particular, the study option of 'learning a little about a lot' was not going to be possible if 'a lot' was not available to students within a particular institution.

Most of the flexibility of the learning pathways described above related to quite long-term journeys, crossing disciplines, institutions, acquiring modules and credits that could lead eventually to qualifications. But flexibility could also be found within individual modules. This seemed to be particularly the case for Exeter where, for example in the degree apprenticeships, diverse delivery methods are described as including ‘block delivery, masterclasses, blended learning, online interactive seminars, workplace mentors, and extensive use of workplace learning’. And the micro-credentials to be obtained through FutureLearn and the Open University provide major learning pathways, short or long, for learners at all life stages.

More generally, flexible learning pathways exhibit a range of dimensions including academic partnerships, accreditation of prior learning, part-time and online studies, and degree apprenticeships. There is also a Flexible Combined Honours programme at Teesside, not dissimilar to the Liberal Arts and Natural Science programme at Birmingham, both of which provide a diversity of pathways for their students. What is also evident from these examples is that where students are given a lot of choice between different learning pathways, they need to be provided with a lot of information and advice to help them make the ‘right choices’.

Looking ahead

Institutional autonomy remains a significant feature of higher education in the UK. As we have already noted, this brings challenges for the higher education system as a whole and a tension between competitiveness and collaboration in the relationships between individual institutions. But as well as challenges, it brings opportunities. In principle, it can promote diversity of provision though here, even within the institutional context, there can be a tension between academic and business values in shaping institutional strategies and future developments. There might be academic and educational benefits for students in crossing institutional boundaries, but there might be business and financial dangers for institutions in allowing them to do so.

Currently, there appears to be relatively little cross-institutional mobility of students between UK universities, partly due to curriculum diversity and mismatches and partly due to business competition between institutions. But this limits the range of flexible learning pathways that are available. So, one question for the future is whether there needs to be a shift away from the standard model of ‘studying a degree course at a single institution’ to ‘collecting certificated modules from several institutions’. The latter might lead to the same qualification as the former but involve different study methods, different subjects, and different timescales. The acquisition of microcredentials may become an increasingly important feature of flexible learning pathways in the future, especially in a lifelong learning context. In a world where knowledge

can be acquired from many different sources, the question of the certification of learning becomes increasingly important. People can acquire knowledge and skills from many different sources and locations, work-based and online, in particular. In some fields, this can be very useful, as a way of both accessing knowledge and applying it to distinctive contexts. But can this knowledge be recognized by others? It needs to be if it is going to be used effectively. And even within the higher education institutional community, if students are going to be able to access knowledge from different institutions, questions arise about the certification of knowledge acquired from different sources.

The UK has a large and diverse higher education system to which needs to be added knowledge sources beyond the walls of the higher education institutions themselves. Burton Clark's distinction between 'vertical' and 'horizontal' differentiation remains relevant. Is something just 'different' or is it 'better' than something else? Flexible learning pathways require that choices be made about which pathways to follow at which life stages and towards which destinations. Choices need information, advice, and support, but they also benefit from independence and objectivity from the provider of that information, advice, and support.

There are a range of questions here about the relationships between higher education institutions and the roles of other organizations providing information about their educational provision, its quality and its relevance to different learning pathways. In general, there seems to be quite wide support for greater diversity of higher education, but this must entail a good matching between the diversity of provision and the diversity of student needs and aspirations (Brennan & Patel, 2011). There may be an important role for independent national bodies such as the Office for Students and the Quality Assurance Agency in the UK in providing information to society about what is on offer across the large and diverse higher education system.

All of the above questions need to be set within the changing contexts of 'knowledge societies' and 'lifelong learning'. The focus can no longer be limited to the period between leaving school and getting a job. Engagement with higher education is likely to occur at different life stages, reflecting employment needs, social (and geographical) mobility, and the continuing emergence of 'new knowledge' with many implications for 'new lives' in 'new societies'. And students will be taking knowledge into higher education institutions as well as acquiring it and bringing it out into the community. Thus, knowledge exchange will need to be in both directions, from teacher to learner and from learner to teacher!

In the next and final chapter of this report, we present some conclusions and recommendations for the future development of flexible learning pathways in higher education to meet the

changing needs of British society. There are challenges for higher education, in its funding, governance, autonomy, market, and quality assurance, as well as in both maintaining and developing its education provision to meet changing needs in changing times. There also remains a question of whether too much diversity of higher education might undermine its distinctive mission and value to society.

Chapter 6. Some conclusions, recommendations, and questions

The diversity of UK higher education provides a potentially wide range of learning pathways for individuals to follow at different life stages. It is also possible for learners to change pathways, though there can be risks involved. For higher education institutions, there is a tension between being a ‘successful business’ and/or being a ‘successful university’, although the clear requirement is to be both. For the ‘users’ of higher education, whether students, employers, or governments, there are questions about ‘who pays?’, ‘who benefits?’ ‘who wins?’ and ‘who loses?’ in the higher education ‘game’. Below are a set of questions about future higher education learning pathways, the quality of the journeys, and the eventual destinations.

- 1) Who makes the key decisions? And who *should* make them? Students? Academics? Their departments? Their institutions? Regulatory and funding bodies? Governments? Of course, decisions have to be taken at all these levels and decisions at each level have consequences for decisions at the other levels. And greater flexibility means that more decisions are required. But they need to be well-informed decisions.
- 2) Does there need to be more or less diversity? What are the limits beyond which higher education ceases to be ‘higher’? And anyway, where does ‘higher education’ sit within a world of ‘post-18’, ‘adult learning’, ‘further education’, ‘work-based learning’, ‘online education’ and more, and will flexible learning pathways need to cross these learning boundaries?
- 3) And if there needs to be greater diversity, who will use and benefit from it? Who will provide it and who will pay for it? And on the latter point, how will the new Lifelong Loan Entitlement to be introduced in England be organized so as to achieve its aims of addressing issues of flexibility, employability, and social equity in accessing higher education at different life stages?
- 4) Who ‘certificates’ learning may become as important a question as who provides it. In the context of lifelong learning and the development of ‘knowledge societies’, questions of ‘recognition’ of knowledge gained become as important as questions about ‘how’ and ‘where’ it is gained. Could an institution such as the UK Open University or its FutureLearn partner develop systems to validate and recognize knowledge acquired from an increasingly wide range of sources? Will microcredentials become a ‘new normal’ in the recognition of learning in higher education and beyond?

- 5) Flexible learning pathways will enable learners to cross boundaries: of subjects, institutions, and countries. But there can be safety issues with boundary crossing. Will a system of red and green lights need to be created and placed at the potential boundary crossings? Can and should quality assurance 'go international'?
- 6) In providing lifelong learning, are there different needs at different life stages? Are universities with distinctive missions, such as the Open University and Birkbeck College at the University of London, both of which focus on lifelong learning, essential or can all providers potentially meet all learner needs?
- 7) What information is needed to enable learners to follow the right pathways and reach their desired destinations? And who should provide it? Is this a quality-assurance function?
- 8) Will flexible learning pathways reinforce higher education's role in reproducing social inequalities or its role in reducing them? Who can access each pathway and what is the destination?
- 9) Will new and alternative providers of higher education provide new and alternative learning pathways for new learners? And will existing providers adapt and innovate to provide new learning pathways? Will the UK higher education system become more diverse or more conformist?
- 10) What will be the balance between academic and vocational pathways and destinations? Will graduates satisfy existing employer requirements? Or will graduates be 'change agents' in the organizations they enter?

There are doubtless many other questions that can be posed about flexible learning pathways, the potential benefits they can bring to society, and the challenges (and opportunities) that they bring to higher education itself. However, there can also be questions about the limitations that should be set on flexibility. Are there dangers that some essential features of what constitutes higher education will be lost, that knowledge obtained from institutions of higher education will not be distinctive and of special value? Will there be more that can be learned 'on the job' rather than 'before the job'?

These are probably not questions that the UNESCO FLP project can answer, but they are important questions to ask. They link to quite longstanding questions about the academic and vocational balance, in UK higher education in particular. Future economic needs are leading policy thinking about future developments of higher education. However, historically 'where'

you study has always been as important as ‘what’ you study in UK higher education. Increasingly, it may be necessary to study in different places to obtain knowledge of different kinds and in different fields. And this, for many learners, may require pathways that will cross traditional boundaries. Birmingham’s LANS degree programme is one interesting example of how this can be made to happen.

In their classic text, *Process and structure in higher education*, Tony Becher and Maurice Kogan (1980) placed much emphasis on the ‘basic unit’ of the university department, defined by the subject it taught and researched, rather than on the parent university itself, which played a more administrative and organizational role. And for students, their academic subject was the identity – as historian, sociologist, chemist, philosopher, etc. – that was being acquired through their higher education journey. But arguably, the department/subject basic unit is no longer so central. And in the future, it may be that ‘studying modules to acquire credits’ will replace ‘completing courses to acquire a degree’ as the central experience of studying in higher education. And the credits may be acquired from different places. Of course, every so often, credits can be cashed in to obtain qualifications, and university degrees will remain important qualifications to be acquired.

It might even quite soon become a requirement that university degrees will need to be issued with ‘use by’ dates attached to them! In our knowledge societies, there are continuously new things that need to be learned, whether from universities, workplaces or the internet. Knowledge and skills need to be updated or topped up regularly. Might universities begin to offer lifelong learning services to their alumni to enable them to remain ‘knowledgeable’ in their chosen fields?

Learning outside the boundaries of educational institutions presents another central question. Knowledge can be obtained from different sources and in different ways, but how is it to be recognized? Certification, linked to the wider question of quality assurance, is another important issue which has implications for answers to another question: ‘Whose knowledge should we believe’?

For massified higher education systems located in globalized knowledge societies, flexible learning pathways will take learners on some quite long journeys, crossing lots of boundaries, and, quite often, heading for quite uncertain destinations. When the learner ends up in the wrong destination, there will need to be another learning pathway waiting for him or her to follow.

While there is clearly need for greater flexibility in the learning pathways through higher education, there are also considerable challenges, for institutions in providing them and for learners in choosing them. Although some pathways can provide different routes to the same destination, learning pathways generally lead to different destinations. But their flexibility can allow learners to change direction. However, they need to be informed and advised about the options and choices that are available. As with pathways between places, the traveller from Manchester heading for Glasgow can change direction and get on the pathway to Edinburgh. But if the traveller heading for Glasgow decides to go to London or Southampton, he or she will have to turn around and return to Manchester. Then start their journey all over again! Travellers on flexible learning pathways in higher education will need to be provided with good education maps to avoid getting lost!

Flexible learning pathways will be needed to meet lifelong learning needs. But learners travelling on the pathways will need to know about their possible destinations and be able to change pathways if they discover they are heading in the wrong direction. And it is not just the learners who need to be informed. The providers of higher education, whether a course, department, faculty, or institution, need to have a good understanding of the wider higher education system of which they are part. In order to meet the needs of learners, providers need to know about the pathways the learners are travelling. Academic staff are in the minority of staff numbers at many higher education institutions today. And they, and their students, need an increasing range of professional support services from their universities in order to adapt and meet the learning needs of students during the journeys along their flexible learning pathways.

As indicated in this report, there are a lot of changes taking place in UK higher education at the present time. And they have implications and present challenges for the ways in which higher education will be able to provide flexible learning pathways. Below are some recommendations as to how some of these challenges can be met.

- (i) There is a need for more attention to be given to the certification of learning, as well as its delivery. The micro-credentials to be acquired from different sources, within and beyond the walls of higher education, can provide recognition of learning achievements over time as well as a route towards the acquisition of traditional degree awards. Credit transfer will be increasingly important in a world of lifelong learning, but it needs to be properly organized and recognized.

- (ii) The three- or four-year bachelor's degree taken immediately after leaving school can no longer be regarded as the norm. And in providing financial support to enable learning at different life stages, the provision of the Government's proposed Lifelong Loan Entitlement could be of great benefit although there are important questions to be addressed as to how it should be provided and used.
- (iii) Greater collaboration between higher education institutions and employers would also benefit both learners and users. Degree apprenticeships and other forms of work-based learning need to be further developed as important components of successful knowledge societies.
- (iv) Broadening the student experience, as done by the Birmingham LANS degree, can bring benefits to both learners and society, but it requires learning pathways that can cross the boundaries of subjects, institutions, teaching and learning methods (face-to-face and online), and countries.
- (v) The considerable growth in the numbers of international students provides both challenges and opportunities, and not just for the international students themselves. Students can learn from the social experience of higher education as much as from the academic experience. Increasing and supporting international student mobility could bring many benefits.
- (vi) As higher education diversifies in so many ways, the importance of effective quality assurance grows. But quality assurance may also need to diversify, moving beyond courses and institutions as the major units of analysis. The balance between regulatory control and quality enhancement needs to be examined, as do the balance and relationships between external and internal institutional quality-assurance processes.
- (vii) The distinction between vertical and horizontal differentiation of higher education is referred to several times in this report. Rankings and league tables of UK universities have led to obsessions with vertical differentiation whereas, arguably, the need is for more of the horizontal. Learners and societies need many different things from higher education and no institution is going to be 'excellent at everything'.
- (viii) Also related to the issue of vertical differentiation are the issues of social equity and higher education's role in achieving and/or in blocking it. UK higher education has

some institutions which largely recruit the ‘privileged’ and help ensure that they remain so. Should admissions processes be contextualized to take account of social background? Greater social equity is also about greater social cohesion, and more comprehensive institutions with greater social diversity among their students could both enhance learning and bring greater social cohesion.

- (ix) There remain important questions about what, when, where, and how people learn. And it is clear that answers to these questions are changing. It seems increasingly likely that forms of ‘blended learning’ are going to become the ‘new normal’. Most universities are providing some forms of online learning, in many cases in response to the coronavirus pandemic, and this is bringing both challenges and opportunities for both institutions and students. There are quality issues involved in blended learning which will need to be addressed, both institutionally and nationally (and internationally).
- (x) Most higher education institutions are diverse institutions with staff divided into ‘academic tribes’ (defined by their subject identities) and administrative support staff who ‘run the shop’. However, recent years have seen the arrival of stronger institutional managements and new professionals who bring in specialist support to areas such as quality assurance, graduate employability, information technology, and many other important issues for higher education and its students. There needs to be good communication and knowledge exchange across an institution to ensure that it is making the best use of its own knowledge and expertise for its own decision-making and development. This is also necessary if students are to be well-informed about the flexible learning pathways available to them and if university staff are going to be well-informed enough to provide them. Higher education needs to get ‘less tribal’.

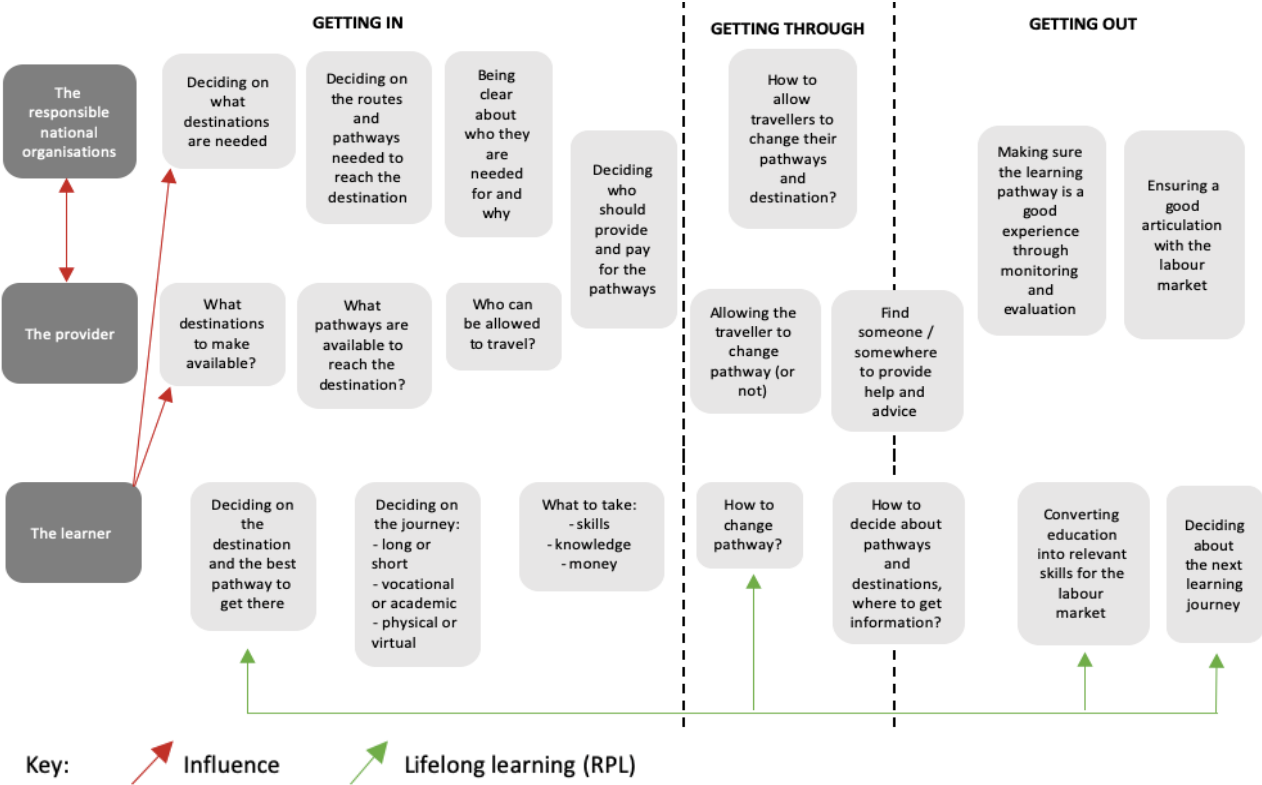
Flexible learning pathways need to take learners to their desired destinations. Though sometimes the learners may not be sure what their desired destination is. Hence the need for flexibility. But there is also a need for a good learning journey, an experience to enjoy. The following quotation from the FutureLearn website captures it well:

We believe learning should be an enjoyable, social experience, so our courses offer the opportunity to discuss what you’re doing with others as you go, helping you make fresh discoveries and form new ideas. (FutureLearn, n. d., *About FutureLearn*)

The FutureLearn quote could also apply to the learning journey of higher education itself, reminding us of the above quotation from Emile Durkheim, (cited in Clark, 1981) that universities must ‘bend and adapt themselves to a whole variety of circumstances and environments’.

Flexible learning pathways provide learners with a lot of choice and a lot of decisions to make. They take the higher education experience beyond the wall of the discipline-based university department and require collaboration and decisions to be made collectively within and between higher education institutions. Therefore, it is extremely important that these decisions are informed decisions. The following chart attempts to summarize some of the decisions that will need to be made by different stakeholders in the flexible learning pathway journey. And, of course, increasingly, many learners will make several learning journeys over their lifetimes, going in, through, and out of different learning pathways.

Figure 5. A flexible learning pathway: Decisions for key stakeholders



Source: Elaboration by the author

Given that higher education institutions have strong autonomy, both the national bodies and the providers shape the way FLPs are thought about, implemented, and assessed, as well as who they benefit. They have several tools to do so, ranging from alternative admissions policies and transfers crossing boundaries between disciplines, programmes or institutions, to quality

assurance and monitoring policies. But in the end, it is the student who chooses which pathways meet their needs, according to their background and aspirations. They should be able to choose when they enter and get out of the higher education system throughout their lives thanks to FLPs and, notably, lifelong learning programmes. There is no unique educational journey.

However, flexible learning pathways may not be the right pathways for everybody. When the intending student has a very clear and definite aim and understanding about the eventual destination of their learning pathway, then flexibility will not be needed and might even damage the learning process. It's like taking a train from London to Edinburgh. A train going directly there with no stops in between the two cities will be a much faster and easier travel experience than taking one train that stops at seven stations up to Darlington and then changing trains and getting one that stops at six stations before finally reaching Edinburgh. For the student who is quite sure what he or she wants and is going to be a lawyer or a dentist, there is no need to have the flexibility to change courses, institutions, or countries on the learning journey. However, in a rapidly changing world and facing futures that are quite unknown, flexible learning pathways are undoubtedly going to be needed by most of us. And we are likely to need to follow several of them at different stages in our lives.

Finally, we will refer to comments recently made by the UK Prime Minister, Boris Johnson, about learning and lives in the future. They were made after the bulk of this report had already been written so were not included in the earlier chapters about national strategies for higher education. But they are relevant and interesting so are included here.

Higher education loans will be made more flexible, allowing adults and young people to space out their study across their lifetime, and support people to retrain for jobs of the future. My message today is that at every stage of your life, this government will get you the skills you need. (UK Government, 2020)

A strong focus on jobs and skills is welcome, but a wider focus on 'study, work and life' and how to combine them would better fit the purposes of higher education and the needs of learners.

In conclusion, people need flexible learning pathways that can be followed at different life stages. But the danger of flexible pathways is that the learner might get lost! Choices need to be informed choices and people working or studying in higher education need to be well-informed about higher education as a whole, and not just the local 'academic tribe' of their department or course. But in making choices, whether as individuals or as institutions, it is important that 'self-interest' does not always override 'societal interest'. The concept of the

'public good' as central to the life of a university needs to be protected. The higher education sector needs to have good knowledge about itself as well as about everything else!

References

- Augar, P. (2019). Post-18 review of education and funding: independent panel report. London: Department for Education.
- Becher, T. 1989. *Academic Tribes and Territories*, Buckingham: Open University Press.
- Becher, T.; Kogan, M. 1980. *Process and structure in higher education*. Studies in social policy and welfare: 1). London: Heinemann Educational.
- Bindé, J.; Matsuura, K.; UNESCO (United Nations Educational, Scientific and Cultural Organization). 2005. *Towards knowledge societies*. UNESCO World Report. Paris: UNESCO Publishing
- Blackman, T. 2020. 'Rolling forward comprehensive education: The case for comprehensive universities'. In: J. Furlong and I. Lunt (Eds), *Social Mobility and Higher Education: Are grammar schools the answer?* HEPI Occasional Paper 52, Oxford: Higher Education Policy Institute.
- Boliver, V. and Crawford, C. and Powell, M. and Craige, W. 2017. *Admissions in context, the use of contextual information by leading universities*. London: The Sutton Trust. Retrieved from: https://www.suttontrust.com/wp-content/uploads/2019/12/Admissions-in-Context-Final_V2.pdf
- Brennan, J.; Cochrane, A.; Lebeau, Y.; Williams, R. 2018. *The University in its Place: Social and Cultural Perspectives on the Regional Role of Universities*. Dordecht: Springer.
- Brennan, J.; Edmunds, R.; Houston, M.; Jary, D.; Lebeau, Y.; Osborne, M.; Richardson, J. 2010. *Improving what is learned at university: An exploration of the social and organisational diversity of university education*. Abingdon: Routledge.
- Brennan, J.; Patel, K. 2011. 'Up Market or Down Market: Shopping for Higher Education in the UK'. In: P. N. Teixeira and D. Dill (Eds), *Public Vices, Private Virtues: assessing the effects of marketisation in higher education*. Rotterdam: Sense Publishers.
- Callender, C.; Thompson, J. 2018 *The lost part-timers, the decline of part-time undergraduate higher education in England*. London: The Sutton Trust. Retrieved from: <https://www.suttontrust.com/wp-content/uploads/2019/12/The-Lost-Part-Timers-Final.pdf>

- Clark, B. 1981. *The Higher Education System*, Berkeley: University of California Press.
- Collins Dictionary. n.d. Further education college. Retrieved from on January 18, 2021: <https://www.collinsdictionary.com/dictionary/english/further-education-college>
- Commission for Employment and Skills; Universities UK. 2014. *Forging Futures: Building Higher level Skills through University and Employer Collaboration*. London: Universities UK. Retrieved from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/356749/FF_FinalReport_Digital_190914.pdf
- Department for Business, Innovation and Skills. 2016a. *Higher Education Research Bill: Factsheet*. Retrieved from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/543500/bis-16-285-higher-education-research-bill-summary.pdf
- Department for Business, Innovation and Skills. 2016b. *Understanding the Market of Alternative Providers and their Students in 2014*. Retrieved from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/524453/he-alternative-providers-2014.pdf
- Department for Education. 2015. *Statistical first release. Destination of key stage 5 and key stage 5 students, 2012/13*. Retrieved from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/397946/SFR01-2015_DESTINATION_MEASURES.pdf
- Department for Education. 2017. *Accelerated degrees in Higher Education – literature review*. Retrieved from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/595637/Accelerated_Degrees_Literature_Review.pdf
- Department for Education. 2018. *Characteristics of young people who are long-term NEET*. Retrieved from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/679535/Characteristics_of_young_people_who_are_long_term_NEET.pdf
- Department for Education. 2019a. *Independent panel report to the Review of post-18 Education and Funding*. Retrieved from:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/805127/Review_of_post_18_education_and_funding.pdf

Department for Education. 2019b. *Choices that students make between different post-18 routes and whether these choices are effective and reliably informed: review of relevant literature and evidence*. Retrieved from:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/804846/DfE_Review_Educ_and_VET_choices_-_Final.pdf

Durham University Evidence Centre for Education. 2020. *Using Contextualized admissions to widen access to higher education: A guide to the evidence base*. Retrieved from:

<https://www.dur.ac.uk/resources/dece/ContextualisedHEadmissions.pdf>

Elliot Major, L.; Banerjee, P.A. 2019. *Social Mobility and Elite Universities*, Oxford: Higher Education Policy Institute.

Friedman, S.; Laurison, D. 2019. *The class ceiling: Why it pays to be privileged*. Policy Press and Bristol University Press.

FutureLearn. n. d. *Microcredentials and Programs*. Retrieved from:

<https://www.futurelearn.com/programs?main-nav-submenu=main-nav-courses>

FutureLearn. n. d. *Online Degrees from Top Global Universities*. Retrieved from:

<https://www.futurelearn.com/degrees>

FutureLearn. n. d. *University of Exeter*. Retrieved from:

<https://www.futurelearn.com/partners/university-of-exeter>

HESA (Higher Education Statistics Agency). 2019. *Finance Record 2017/2018 – Contents*. 7 January 2019. Retrieved from: <https://www.hesa.ac.uk/collection/c17031>

HESA. 2020a. *Higher Education Student Statistics, UK, 2018/2019*. 20 January 2020.

Retrieved from: <https://www.hesa.ac.uk/news/16-01-2020/sb255-higher-education-student-statistics>

HESA. 2020b. *Widening participation: UK Performance Indicators 2018/19*. Retrieved from:

<https://www.hesa.ac.uk/data-and-analysis/performance-indicators/widening-participation>

- HESA. 2020c. *Non-continuation: UK Performance Indicators 2018/19*. Retrieved from: <https://www.hesa.ac.uk/data-and-analysis/performance-indicators/non-continuation-1819>
- HESA. 2020d. *Higher Education Graduate Outcomes Statistics: UK, 2017/2018 - Graduate reflections*. Retrieved from: <https://www.hesa.ac.uk/news/18-06-2020/sb257-higher-education-graduate-outcomes-statistics/reflections#>
- HESA. n. d. Table 22 – Destinations of UK domiciled leavers 2010/11, by level of qualification obtained, sex, HE provider mission group, HE provider tariff group, subject area**, activity and assessment of skills obtained during HE experience. Retrieved from: hesa.ac.uk/files/long_dlhe_1011_table_22.xlsx
- HESA. n. d. *Who's studying in HE?: Personal characteristics*. Retrieved from: <https://www.hesa.ac.uk/data-and-analysis/students/whos-in-he/characteristics>
- HESA. n. d. *Destination of Leavers from Higher Education Longitudinal survey*. Retrieved from: <https://www.hesa.ac.uk/data-and-analysis/publications/long-destinations-2012-13>
- House of Commons Committee on Exiting the European Union. 2018. *Higher Education Sector Report*. Retrieved from: <https://www.parliament.uk/documents/commons-committees/Exiting-the-European-Union/17-19/Sectoral%20Analyses/19-Higher-Education-Report.pdf>
- House of Commons Library. 2018. *Briefing paper. NEET: young people not in education, employment or training*. Retrieved from: <https://commonslibrary.parliament.uk/research-briefings/sn06705/>
- Independent Commission on the College of the Future. 2020. *People, productivity and place: a new vision for colleges*. Retrieved from: https://static1.squarespace.com/static/5c8847f58dfc8c45fa705366/t/5f1712a7b7c02d65b1b8c822/1595347633317/English_ICCF++People%2C+productivity+and+place+FINAL.pdf
- Kahin, B.; Foray, D. 2006. *Advancing Knowledge and the Knowledge Economy*. Cambridge, MA: MIT Press.
- Office for National Statistics. 2020. *Young people not in education, employment or training (NEET), UK: May 2020*. Retrieved from:

<https://www.ons.gov.uk/employmentandlabourmarket/peoplenotinwork/unemployment/bulletins/youngpeoplenotineducationemploymentortrainingneet/may2020>

Office for Students. 2020. *Strategic Guidance to the Office for Students – Ministerial Priorities*. Retrieved from: <https://www.officeforstudents.org.uk/media/1a105d7c-e6ef-4e3d-ab23-bd3e93e01257/letter-from-the-education-secretary-sept19.pdf>

OpenLearn. (n. d). *Blended learning*. Retrieved from: <https://www.open.edu/openlearn/ocw/mod/oucontent/view.php?id=77528§ion=2>

Open University. 2020. *The Open University Strategic Plan to 2021/22*. Retrieved from: <http://www.open.ac.uk/about/main/sites/www.open.ac.uk.about.main/files/files/OU%20Strategic%20Plan%20to%202021-22.pdf>

Savage, M. 2015. *Social class in the 21st century* (Pelican introduction). Penguin UK.

Sutton Trust and Social Mobility Commission. 2019. *Elitist Britain 2019: The educational backgrounds of Britain's leading people*. London: The Sutton Trust. Retrieved from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/811045/Elitist_Britain_2019.pdf

Teesside University. 2020. *New study reveals Teesside University's value to the economy*. Retrieved from: https://www.tees.ac.uk/sections/business/news_story.cfm?story_id=7459&this_issue_title=July%202020&this_issue=326

Teesside University. n. d. University statistics. Retrieved from: https://www.tees.ac.uk/sections/about/public_information/factsandfigures.cfm

Trow, M. A. 1974. *Problems in the Transition from Elite to Mass Higher Education*. General Report on the Conference on Future Structures of Post-Secondary Education: 55–101. Paris: OECD.

Trow, M. A. 2010. 'Reflections on the Transition from Elite to Mass to Universal Access'. In: Burrage, M. (Ed) *Martin Trow: Twentieth Century Higher Education: elite to mass to universal higher education*. Baltimore [Md.]: Johns Hopkins University Press.

UK Government. 2019. *Age profile by ethnicity*. 31 July 2019. Retrieved from: <https://www.ethnicity-facts-figures.service.gov.uk/uk-population-by-ethnicity/national-and-regional-populations/regional-ethnic-diversity/latest#ethnic-groups-by-area>

- UK Government. 2020. *Press release. Major expansion of post-18 education and training to level up and prepare workers for post-COVID economy*. 29 September 2020.
Retrieved from: <https://www.gov.uk/government/news/major-expansion-of-post-18-education-and-training-to-level-up-and-prepare-workers-for-post-covid-economy>
- UNESCO. 2016. *Education 2030: Incheon Declaration and Framework for Action for the implementation of Sustainable Development Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning for all*. Paris: UNESCO Publishing.
Retrieved from: <https://unesdoc.unesco.org/ark:/48223/pf0000245656>
- UNESCO-UNEVOC. n.d.. *Massive Online Open Course*. Retrieved from on January 28, 2021: <https://unevoc.unesco.org/home/TVETipedia+Glossary/filt=all/id=320>
- University of Birmingham. n. d. *Five examples of real student pathways in Natural Sciences and Liberal Arts and Sciences*. Retrieved from:
<https://www.birmingham.ac.uk/Documents/liberal-arts/Natural-Sciences.pdf>
- University of Birmingham. n. d. *The global university at the heart of an ambitious city*. Retrieved from:
<https://www.birmingham.ac.uk/index.aspx/research/perspective/news/latest/2020/04/>
- University of Exeter. n. d. *Facts and Figures*. Retrieved from:
<https://www.exeter.ac.uk/about/facts/facts/>
- University of Exeter. n. d. *Flexible Combined Honours – Prospective undergraduates*. Retrieved from: <http://www.exeter.ac.uk/fch/studying/prospective-undergraduates/>
- University of Exeter. n. d. *Proficiency in Applied Data Analysis*. Retrieved from:
<http://socialsciences.exeter.ac.uk/q-step/study/pada/>
- University of Exeter. n. d.. *What is pathways to data analytics?* Retrieved from:
<http://www.exeter.ac.uk/careers/events/professionalpathways/pathwaystodata/>
- Universities UK. 2018a. *The economic case for flexible learning. Main findings and policy recommendations*. Retrieved from: <https://www.universitiesuk.ac.uk/policy-and-analysis/reports/Documents/2018/the-economic-case-for-flexible-learning.pdf>
- Universities UK. 2018b. *Flexible learning, the current state of play in UK higher education*.

Retrieved from: <https://www.universitiesuk.ac.uk/policy-and-analysis/reports/Documents/2018/flexible-learning-the-current-state-of-play-in-higher-education.pdf>

Universities UK. 2018c. *Patterns and trends in UK higher education 2018*. Retrieved from: <https://universitiesuk.ac.uk/facts-and-stats/data-and-analysis/Documents/patterns-and-trends-in-uk-higher-education-2018.pdf>

Universities UK. 2018d. *Routes to high-level skills*. Retrieved from <https://www.universitiesuk.ac.uk/policy-and-analysis/reports/Documents/2018/routes-to-high-level-skills.pdf>

Annexes

Annex 1. Students characteristics

Annex 1.1. HE student enrolments at higher education, further education, and alternative providers by level of study (in 2014/15 and 2018/19)

Study level	2014/15	2018/19
<i>Postgraduate</i>		
Higher ed	538,175	585,730
Further ed	3,050	2,625
Alternative	20	16,380
<i>First degree</i>		
Higher ed	1,524,235	1,652,485
Further ed	24,305	21,620
Alternative	23,920	37,380
<i>Other undergraduate</i>		
Higher ed	203,570	144,050
Further ed	162,320	151,535
Alternative	25,920	17,630
<i>Total</i>		
Higher ed	2,265,980	2,382,265
Further ed	189,675	175,780
Alternative	49,860	71,390

Source: Adapted from HESA, 2020a

Annex 1.2. Students at alternative providers, 2018/19

Sex: F = 39,925, M = 31,380
Age: 20 & under = 13,710, 21–24 = 20,615, 25–29 = 10,840, 30+ = 26,225
Ethnicity: White = 34,610, Black = 13,370, Asian = 7,685, Mixed/other = 4,280

Source: Adapted from HESA, 2020a

Annex 1.3. Subjects of qualifications gained by students at alternative providers, 2018/19

All science	Business studies	Law	History	Creative arts	All
2,380	7,290	9,670	1,010	3,770	23,480

Source: Adapted from HESA, 2020a

Annex 1.4. UK students by subjects studied (all levels)

Annex 1.4.1. Full-time students enrolled in science subjects, 2016–2019

	2016/17			2017/18			2018/19
	Total	F	M	Total	F	M	Total
Medicine, dentistry etc	238,415	181,945	62,130	244,195	186,960	62,160	249,290
Biology	186,960	120,325	71,625	192,065	124,715	71,470	196,355
Vet science	5,835	4,915	1,270	6,190	5,150	1,330	6,480
Agriculture	13,885	9,355	4,425	13,785	10,125	4,255	14,390
Architecture	37,790	16,670	23,280	39,980	17,390	23,745	41,155
Physics	86,060	36,805	49,955	88,815	36,705	48,630	85,410
Maths	37,605	14,115	24,340	38,490	14,615	24,975	39,635
Computing	83,745	15,205	73,535	88,800	16,945	77,605	94,655
Engineering	135,985	26,425	110,680	137,150	27,555	109,690	137,310
All science	826,265	425,765	421,235	847,440	440,160	423,860	864,685

Source: Adapted from Higher Education Statistics Agency, Higher Education Student Statistics: UK 2018/19 - Student numbers and characteristics HESA, 2020a

Annex 1.4.2. Full-time students enrolled on non-science subjects, 2016–2019

	2016/17			2017/18			2018/19
	Total	F	M	Total	F	M	Total
Social studies	185,290	120,65	73,850	194,590	125,35	75,445	200,960
Law	79,875	55,610	31,430	87,070	58,600	31,945	90,610
Business	297,700	155,585	154,136	309,760	160,925	161,040	322,040
Communications	47,365	28,525	19,935	48,520	28,495	19,880	48,435
Languages	85,740	60,115	23,135	83,345	58,180	21,915	80,210
History/ Philosophy	69,285	37,970	31,645	69,690	37,350	30,835	68,285
Art & design	170,125	109,75	63,320	173,320	111,45	63,900	175,805
Education	82,625	67,155	16,355	83,515	67,410	16,075	83,520
Combined studies	3,115	2,585	2060	4645	2735	1960	4695
All non-science	1,021,05	637,860	415,845	1,084,460	650,485	423,010	1,074,555

Source: Adapted from Higher Education Statistics Agency, Higher Education Student Statistics: UK 2018/19 - Student numbers and characteristics; HESA, 2020a

Annex 1.4.3. Part-time students enrolled on science subjects, 2016–2019

	2016/17			2017/18			2018/19
	Total	F	M	T	F	M	T
Medicine, dentistry etc	118,835	85,285	25,885	111,295	84,285	25,990	110,440
Biology	40,145	30,690	12,610	43,365	33,525	13,410	47,085
Vet science	1,310	1195	480	1,675	1,370	550	1,920
Agriculture	4785	2630	2295	4,930	2,790	2,160	4,955
Architecture	15,525	4,705	11,580	16,290	4,910	11,995	16,915
Physics	9110	3,840	5,055	8,905	4,325	5,095	9,420
Maths	6295	2,360	3,745	6,110	2,460	3,835	6,300
Computing	18,445	3,920	15,820	19,750	4,450	16,920	21,390
Engineering	30,040	3,825	25,040	28,875	4,270	24,760	29,055
All science	244,495	138,455	102,500	241,185	142,400	104,710	247,480

Source: Adapted from Higher Education Statistics Agency, Higher Education Student Statistics: UK 2018/19 - Student numbers and characteristics; HESA, 2020a

Annex 1.4.4. Part-time students enrolled on non-science subjects, 2016–2019

	2016/17			2017/18			2018/19
	Total	F	M	T	F	M	T
Social studies	39,635	27,510	11,230	38,785	28,860	11,305	40,230
Law	18,990	13,320	8,175	21,520	13,905	7,925	21,885
Business	62,080	28,525	31,010	59,555	29,800	32,395	62,230
Communications	3,610	2,185	1,330	3,520	2,255	1,330	3,590
Languages	21,405	13,305	6,905	20,280	12,645	6,445	19,235
History/ Philosophy	18,705	9,635	7,940	17,650	9,165	7,600	16,905
Creative arts	15,870	10,490	5,695	16,180	11,160	5,840	17,040
Education	68,935	46,115	16,925	63,080	44,450	15,955	60,480
Combined	35,525	19,080	11,375	30,475	17,015	10,040	27,070
All non-science	284,760	170,140	100,585	271,055	169,250	98,840	268,635

Source: Adapted from Higher Education Statistics Agency, Higher Education Student Statistics: UK 2018/19 - Student numbers and characteristics; HESA, 2020a

Annex 1.5. Student first year enrolments

Annex 1.5.1 Student enrolments (1st years) undergrad/postgrad & FT/PT in science subjects (2018/9)

	Postgraduates		Undergraduates	
	FT	PT	FT	PT
Medicine/Dentistry	5,835	4125	10,965	70
Subjects aligned	13,420	33,635	61,285	31,775
Biology	19,305	7500	59,945	10,980
Veterinary	240	850	1,315	-----
Agriculture	1,425	735	4,840	2,640
Physics	9,805	1,030	20,370	2,380
Maths	4,055	390	11,310	1,330
Computer Science	11,575	2,540	29,640	4,670
Engineering	19,2857	3,000	35,190	7,570
Architecture	7,405	3,420	11,115	3,140
All science	92,350	57,225	245,970	64,550

Source: Adapted from HESA, 2020a

Annex 1.5.2. Student enrolments (1st years) undergrad/postgrad & FT/PT in non-science subjects (2018/19)

	Postgraduates		Undergraduates	
	FT	PT	FT	PT
Social Studies	25,105	9,695	61,870	9,830
Law	17,740	5,020	27,395	4,195
Business	63,215	15,545	100,030	11,305
Communications	8,150	1,040	14,050	195
Languages	7,735	1,960	21,980	8,520
History/Philosophy	6,890	2,695	18,775	3,250
Creative arts	14,540	3,220	57,300	3,010
Education	32,245	19,090	19,400	12,785
Combined	20	915	2,670	14,290
All non-science	175,640	59,180	323,475	67,375

Source: Adapted from Higher Education Statistics Agency, Higher Education Student Statistics: UK 2018/19 - Student numbers and characteristics; HESA, 2020a

Annex 1.5.3. Five most popular subjects (based on enrolments)

Postgraduate FT:

1. Business, 2. Education, 3. Social studies, 4. Biology, 5. Engineering

Postgraduate PT:

1. Aligned to Medicine, 2. Education, 3. Business, 4. Social studies, 5. Biology

Undergraduate FT:

1. Business, 2. Aligned to Medicine, 3. Biology, 4. Creative arts, 5. Engineering

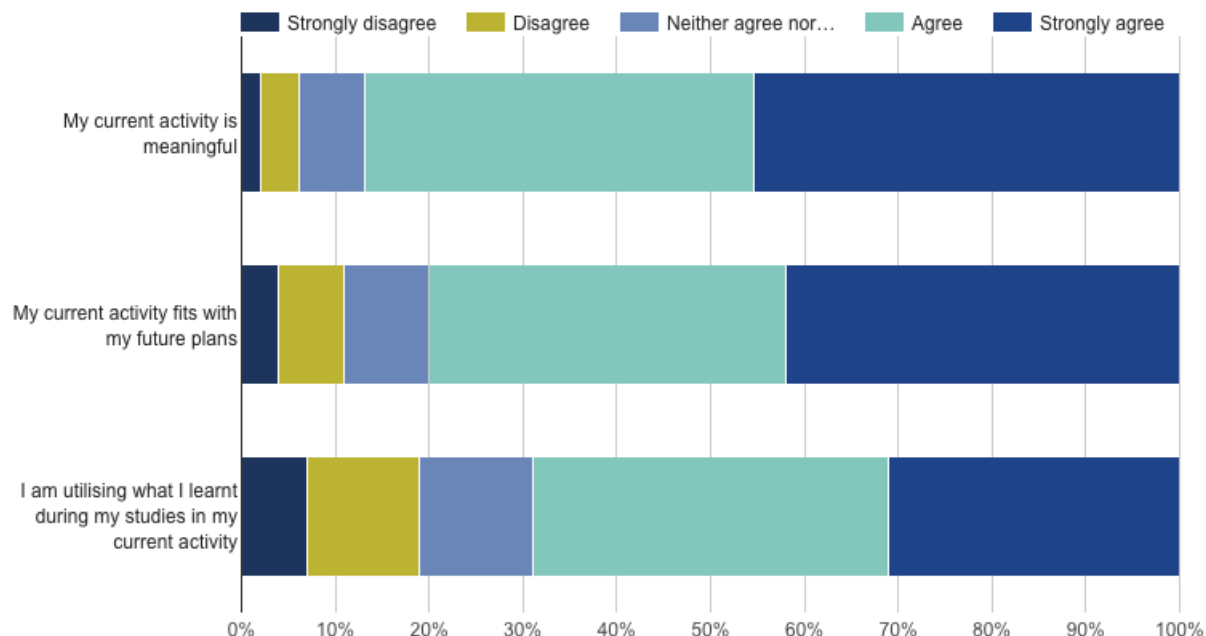
Undergraduate PT:

1. Aligned to Medicine, 2. Combined, 3. Education, 4. Business, 5. Biology

Source: Adapted from Higher Education Statistics Agency, Higher Education Student Statistics: UK 2018/19 - Student numbers and characteristics; HESA, 2020a

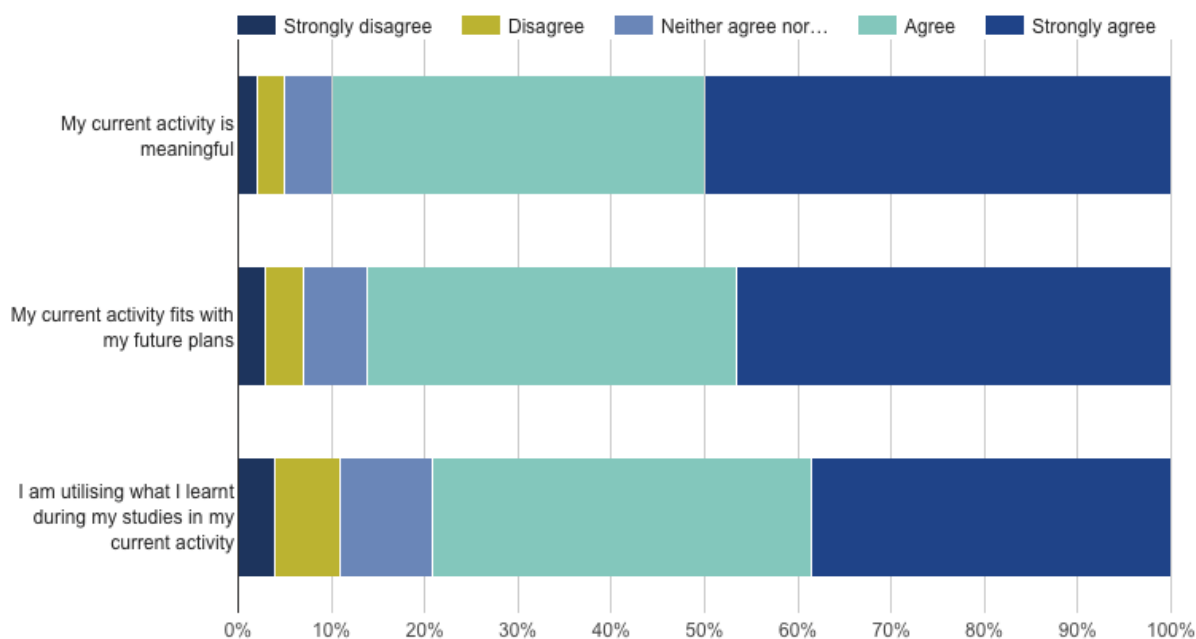
Annex 2. Graduates reflection on their full-time employment activity

Annex 2.1. Graduates from an undergraduate degree reflection on their full-time employment activity, academic year 2017/18



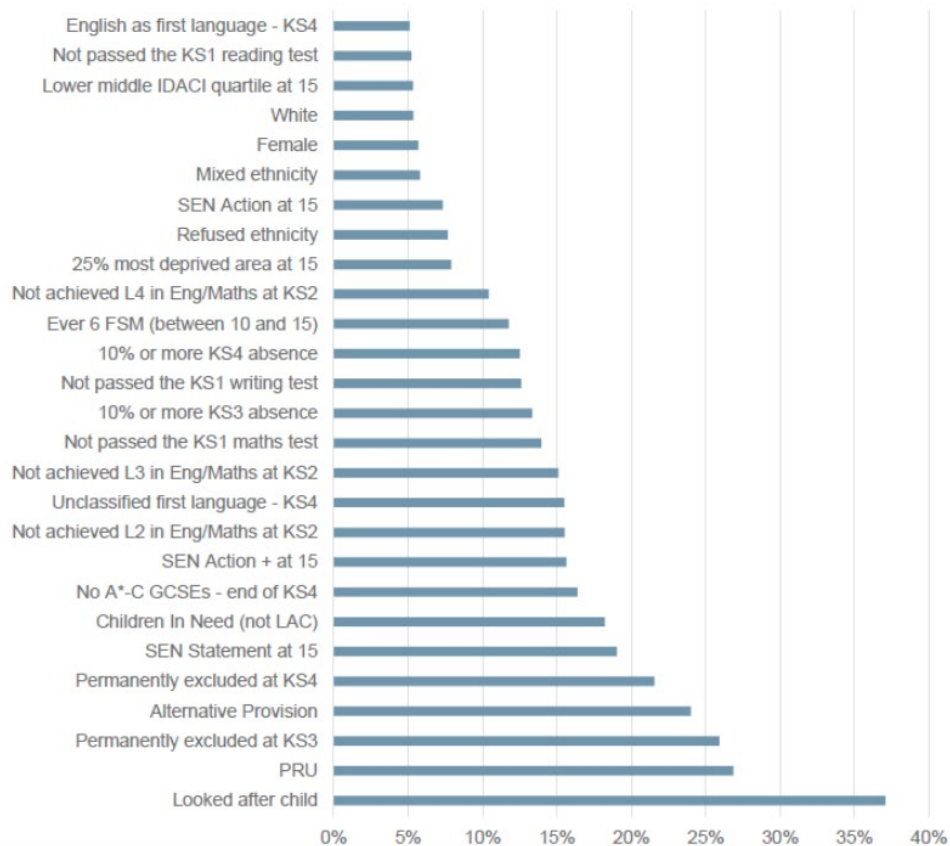
Source: Reprinted from Higher Education Statistics Agency, Higher Education Graduate Outcomes Statistics: UK, 2017/2018 - Graduate reflections; HESA, 2020d

Annex 2.2. Graduates from a postgraduate degree reflection on their full-time employment activity, academic year 2017/18



Source: Reprinted from Higher Education Statistics Agency, Higher Education Graduate Outcomes Statistics: UK, 2017/2018 - Graduate reflections; HESA, 2020d

Annex 3. Proportion of individuals who spent the year NEET by characteristic in 2013/14



Source: Reprinted from Department for Education, 2018; *Characteristics of young people who are long-term NEET (2018)*.

- *Alternative Provision* – refers to places that provide education for children who can't go to a mainstream school;
- *Children in Need* – children referred to local authority social care services because their health or development is at risk;
- *Looked After Child* – when a child is in the care of the local authority for more than 24 hours;
- *PRU (Pupil Referral Unit)* – local authority establishments which provide education for children unable to attend a mainstream school;
- *SEN* – *Special Educational Needs*.

Annex 4. Non-continuation and resumption after first year of degree in 2017/18

Annex 4.1. Non-continuation of study on FT first degree (after year 1)

	FT entrants	No longer in HE	% no longer in HE
Birmingham young students	5,010	125	2.5
Birmingham mature students	255	20	8.6
Teesside young students	2,085	205	9.9
Teesside mature students	1,345	160	11.7
All UK young students	324,530	20,295	6.3
All UK mature students	86,820	10,365	11.9

Source: Higher Education Statistics Agency HESA, 2019

Annex 4.2. Non-continuation of study on PT first degree (after year 1)

	PT entrants	No longer in HE	% no longer in HE
Teesside, under 30	215	25	10.7
Teesside, over 30	130	25	17.8
Open U, under 30	10,785	4,740	44
Open U, over 30	7,235	2,770	38.3
All UK, over 30	19,650	7,145	36.4
All UK, under 30	15,000	5,030	33.3

Source: Higher Education Statistics Agency, Non-continuation: UK performance indicators 2017/18; HESA, 2019

Annex 4.3. Resumption of study on FT first degree after a year out (after year 1)

University	Year out	Return	Different HEI	Left HE
Birmingham	140	15 (11.4%)	45 (31.4%)	80 (57%)
Teesside	170	20 (12.4%)	5 (3.5%)	145 (84.1%)
All UK	20,38	2065 (10.1%)	2,555 (12.5%)	15,760 (77%)

Source: Higher Education Statistics Agency, Non-continuation: UK performance indicators 2017/18; HESA, 2019

Annex 5. Higher education enrolments by age group and disability (academic year 2018/19)

University	Population number	Age group					Students known to have a disability
		≤20	21–24	25–29	≥ 30	Unknown	
Birmingham	35,445	16,710 47.1%	10,840 30.6%	3,040 8.6%	4,850 13.7%	5 0%	3,935 11.1%
Teesside	18,665	5,255 28.1%	4,570 24.5%	2,855 15.3%	5,990 32.1%	0 0%	2,465 13.2%
Exeter	25,010	14,735 58.9%	6,215 24.9%	1,625 6.5%	2,430 9.7%	0 0%	3,790 15.2%
Open	122,360	7,635 6.2%	17,365 14.2%	24,765 20.2%	72,590 59.4%	0 0%	27,300 22.3%
All UK universities	2,383,970	972,280 40.8%	678,210 28.5%	263,280 11%	469,985 19.7%	210 0%	331,170 13.9%

Source: Adapted from HESA, n. d., *Who's studying in HE: Personal characteristics*; UK Government, 2019

Annex 6. Higher education enrolments by age group and disability (academic year 2018/19)

University	Number of UK domiciled students	Ethnicity					
		White	Black	Asian	Mixed	Other	Not known
Birmingham	26,320	18,955 72%	1,395 5.3%	4,080 15.5%	1,205 4.6%	310 1.2%	375 1.4%
Teesside	17,100	15,155 88.6%	470 2.8%	930 5.4%	310 1.8%	145 0.8%	95 0.6%
Exeter	18,680	16,590 88.8%	340 1.8%	720 3.9%	695 3.7%	140 0.8%	195 1%
Open	122,040	107,295 87.9%	4,235 3.5%	4,300 3.6%	2,970 2.4%	910 0.7%	2,330 1.9%
All UK universities	1,898,205	1,415,105 74.5%	137,185 7.2%	209,705 11.1%	75,935 4%	31,230 1.7%	28,995 1.5%
UK population (age 18 to 49, 2011 census)	24,719,701	20,549,338 83.1%	985,016 4%	2,338,874 9.5%	518,382 2.1%	328,091 1.3%	0

Source: Adapted from HESA, n. d., *Who's studying in HE: Personal characteristics*; UK Government, 2019

Annex 7. Evolution of participation of under-represented groups in higher education (POLAR 4 classification*)

Population: UK domiciled young and mature full-time undergraduate entrants with no previous HE who did not leave within 50 days of commencement at higher education provider during the academic years 2015/16 and 2018/19.

University	Share of POLAR 4 quintile 1 young students		Share of POLAR 4 quintile 1 mature students	
	2015/16	2018/19	2015/16	2018/19
Birmingham	6.4%	6%	6.4%	14.5%
Teesside	29.9%	30.6%	24.4%	28.1%
Exeter	4.6%	6%	11.7%	7.8%
Open	N/A	N/A	0%	18.3% **
UK	11.3%	11.6%	11.5%	12.1%

*The Participation of Local Areas 4 (POLAR 4) classification is a UK-wide measure of educational disadvantage based on participation rates in HE. POLAR 4 is divided in five quintiles, with the lowest young participation (most disadvantaged), up to quintile 5 areas with the highest rates (most advantaged).

** Figure only relates to the Open University in England – it does not comprise Northern Ireland, Scotland and Wales

Source: Adapted from Higher Education Statistics Agency, *Widening participation: UK Performance Indicators 2018/19*; HESA, 2020