UNDERSTANDING DEGREE ALGORITHMS

Universities UK

Distinction and Diversity
in Higher Education

GuildHE

CONTENTS

INTRODUCTION

PROJECT OUTLINE

This report summarises the findings of a joint Universities UK-GuildHE project into the configuration of **degree algorithms**[1], – the processes or set of rules that institutions follow to determine a student's final degree classification.

There is a shared UK-wide interest in maintaining robust academic standards and understanding the drivers behind the long-term improvement in degree outcomes. Robust academic standards underpin the UK higher education sector's world-leading reputation, ensure that student attainment is assessed fairly, and provide employers with reliable information about prospective employees. National funders and regulators must also make arrangements to assure themselves of the quality of the education that they fund.[2]

In this context, the project was undertaken at the request of the funding councils to:

   a. map and explain existing practice and trends in relation to the design of degree algorithms in the UK higher education sector

   b. support institutional decision making on algorithms in the context of evolving quality assessment arrangements across the UK

   c. assess whether there are trends that might undermine wider confidence in degree standards

   d. consider whether concerns about threshold effects at degree boundaries are influencing the types of algorithms that are being employed

The design of degree algorithms plays an important role in measuring and classifying student attainment. This report looks specifically at their design, the intent behind changes, and makes recommendations to help improve transparency and maintain confidence in sector standards. The drivers behind the long-term increase in proportion of good degree classifications are multifaceted. Further work will be required to isolate, understand and model the impacts of the different factors, including degree algorithms.

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[1] Terms in bold are defined in-line in the first instance and in the glossary.
[2] In England, the Higher Education and Research Act requires the Office for Students to make arrangements for assessing the quality and standards of registered providers while safeguarding academic autonomy, including definition of standards, curricula and assessment. In Northern Ireland, the Department for the Economy has statutory responsibility for the assessment of the quality of funded higher education. In Scotland, the Further and Higher Education (Scotland) Act 2005 requires the Scottish Funding Council to ensure provision is made for assessing and enhancing the quality of learning and teaching in Scottish higher education institutions. In Wales, the Higher Education (Wales) Act 2015 requires the Higher Education Funding Council for Wales to assess or make arrangements to assess the quality of education provided in Wales.

OVERVIEW

The report finds that improved transparency would help to improve confidence in the design of degree algorithms. Current practice largely reflects the educational missions, pedagogical ethos and practices of institutions that award degrees. A one-size-fits-all approach would undermine diversity and innovation that would likely be to the detriment of the overall quality of the sector and outcomes of students from different backgrounds. Equally, consistency of design is necessary to maintain the confidence of students and employers. This report reviews trends in practice to help a diversifying sector strike the right balance.

In general, the design of algorithms has moved toward a more transparent rules-based approach with a reduction in the discretion of examination boards. This has improved consistency of practice within institutions, such as between disciplines, and aided perceptions of fairness amongst students. However, particular care should be taken that the design of rules on borderline cases do not have the inadvertent effect of lowering the effective threshold for a degree classification across the student population.

Grade improvement is an observable and persistent trend in the higher education sector, both in the UK and internationally. Although understanding the drivers of sector improvement was not the focus of this study, it has not found clear evidence that changes to the design of algorithms are the main cause of sector wide trends. However, changes to algorithms can and do have a material impact on student outcomes and the profile of classifications awarded by institutions and are one of several contributing factors.

Maintaining public confidence in robust academic standards and the comparability of degree outcomes is a challenge for a diverse and autonomous higher education sector. Transparent and effective design of degree algorithms that fairly assess student outcomes and maintain robust academic standards should play an important role in meeting this challenge. To maintain confidence in the design of degree algorithms, this report recommends that:

a. higher education providers should ensure that their degree algorithms are transparent and accessible for students, staff and external stakeholders

b. the process and rationale for making changes to degree algorithms should be transparent and led by robust academic governance arrangements

c. principles of good practice for the design, development and review of degree algorithms should be considered for inclusion in a revised Quality Code to guide institutional decision-making

d. institutions should ensure that the rules governing the assessment of borderline cases do not have the inadvertent effect of effectively lowering the threshold for degree classifications across the student population

e. more work needs to be done to understand the long-term drivers of grade improvement and inflation and develop sustainable measures that can mitigate sector-wide grade improvement

METHODOLOGY

The findings of this report principally rest on a sector survey incorporating responses from just under 120 higher education providers, of which 113 hold degree awarding powers, just over 70% of all degree awarding powers in the UK. A further 15 interviews were undertaken to understand exceptions and practice within the sector. The findings and recommendations were then developed through a series of workshops with practitioners and input from the UK Standing Committee for Quality Assessment, the Universities UK Student Policy Network, the GuildHE Quality Network and representatives of the Academic Registrars Council. Further detail on the methodology is set out in the relevant section of this report.

KEY FINDINGS

1. *Degree awarding bodies regularly review the design of degree algorithms as core elements of academic regulations, and the frequency and impact of changes varies significantly.*

Academic regulations, including degree algorithms, are kept under constant review, but the scale and the impact of these reviews varies. 70% of institutions made changes to their degree algorithm when they last reviewed practice. However, many of these changes have amended specific rules or have had limited impact on student outcomes. The most common reasons for changes have been to standardise practice within an institution or in response to changes in pedagogical practice and design.

Fewer than 10% of institutions indicated that they had made changes to award regulations with the intention of aligning the profile of their awards with comparator institutions or the wider sector. Where this has taken place, the actual impact on the profile of awards was variable. This finding contrasts with the interpretation of an earlier study undertaken by the Higher Education Academy (HEA) into the role of external examiners. The HEA found that institutions were changing algorithms to avoid disadvantaging students in comparison with students in similar institutions.[3]

This study also found that external feedback and sharing of practice is a legitimate and important part of making changes to award regulations, including degree algorithms. Feedback mechanisms include external examiners and enhancement-led reviews. The data collected from institutions suggests that the most common factor in determining and adjusting award algorithms was their pedagogical design.

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[3] http://www.hefce.ac.uk/pubs/rereports/year/2015/externalexam/

2. *Degree algorithms do share common components and practices that can be used to aid transparency and consistency of practice in an increasingly diverse sector.*

There are basic design components that are employed across the sector that are set out in the 'What are degree algorithms' section of this report. While it is relatively easy to identify individual components or rules of a degree algorithm, it is more difficult to group individual components or rules into distinct models. This report maps the components of degree algorithms and identifies common practice and identifies range of practice, including where practice:

- differs but where it is not possible to determine whether one approach is 'better' or 'worse' than any other, for example, the weighting of programme years

- is exceptional because of the nature of provision, for example, in the arts

- is an outlier or presents risks to confidence in individual or sector standards, for example, treatment of boundary cases

Institutions may use this report to help contextualise their own practice, improve transparency and consistency, and identify whether certain practices might undermine confidence in their own or the sector's approach to maintaining standards.

The range of models in use in the sector reflects the features of different institutions. Small and specialist institutions tend to have distinctive academic regulations that reflect the provision they offer. Larger multidisciplinary institutions must develop approaches that can accommodate a wider range of disciplines and practices – for example, arts, humanities and sciences. Providers acquiring degree awarding powers are also likely to adapt their academic regulations to fit the provision they offer, especially where this differs from their validating provider.

3. *There is a trend towards the use of a rules-based approach to consider the classification for students falling close to a grade boundary.*

There has been a shift to a rules-based approach with an emphasis on consistency of practice across an institution rather than approaches that emphasise the discretion of the examination board or equivalent. This approach aims to help ensure that final classification of students is fair, transparent and consistent. This has in part been influenced by scrutiny of grade classification boundaries by students who have paid more for university and are entering into an increasingly competitive jobs market. More recently consumer rights regulations have also highlighted the importance of fair and transparent academic regulations.

4. There is no appetite for adopting Grade Point Average.

The responses received from higher education providers indicate that the adoption of the GPA has been slow and that there is little firm appetite for future uptake. Problems with the GPA include a lack of awareness by students and employers meaning that it is typically used in parallel to conventional classification. In addition, there are multiple ways of designing and implementing GPA and where adoption of the GPA has occurred, it has not delivered the benefits originally envisaged.

5. The design of degree algorithms is one of several factors that contribute to grade improvement.

The design of degree algorithms is a key factor that determines degree outcomes and is likely to be a factor in grade improvement. However, there are many different factors driving this trend and this report has not attempted to isolate the specific impact of changes to degree algorithms. Any consideration of grade improvement must consider the interaction between the following factors:

a. changes in school standards and the development of 16–18 courses and qualifications

b. the relative growth of different subject areas because each area has a different grade profile

c. changes in the characteristics of students relative to the whole population, to assess correlations between student characteristics and attainment

d. the impact of changes in marking practices, including the adoption of full marking scales, grade-based assessment, and other practices such as greater clarity on learning outcomes, and assessment criteria at module and programme level

e. the impact of increased tuition fees – especially in England – on student study behaviours and attainment

f. the impact of increased investment in academic staff and infrastructure on student attainment

g. the impact of staff performance management systems within universities

In summary, a study would need to go below headline institutional trends to explore changes in subject mix, staff and student behaviour, and the impact of changes in marking practices. The observed trends in grade improvement are not unique to the UK, and there is unlikely to be any one single explanation.

WHAT ARE DEGREE ALGORITHMS?

DEFINITION

A degree algorithm is the process or set of rules that institutions follow to determine the final classification of a course or programme.

Degree algorithms are integral to the process of classifying academic awards and their design should be understood in the context of wider institutional arrangements for assuring academic standards. This includes the structure of institutional academic governance, and the internal and external instruments and reference points that degree awarding powers use to assure standards.

USE

In 1807, four examiners assembled in conclave at the University of Oxford. They had spent the previous five days examining 18 candidates for a Bachelor of Arts degree. In an early example of the honours degree classification system, after due deliberation, they assigned 10 of the candidates regarded worthy of distinction into two classes.[4] In the two centuries that have elapsed since, the higher education sector in the UK has undergone significant change, with hundreds of thousands of students graduating from over 150 degree awarding bodies every year.

Today, a higher education provider might have thousands of students graduating each year. While academics continue to assess the work of students, it is no longer practical to assemble the examiners of an institution together in conclave to determine which candidates are worthy of an honours degree. Degree algorithms have therefore been developed by institutions to translate assessed work into a final degree classification. In the recent history of the sector, practice has also been standardised within institutions so that students are treated equitably across faculties and departments.

Where degree algorithms are effectively designed, they mirror the ethos, values, and teaching models and practice of the education provider. All design decisions, whether they relate to the weighting of individual programme years, how borderline cases are considered, or which modules count towards the final classification, say something about the type of provider the degree awarding power is.

Although the honours degree classification is just part of the record of student achievement it remains widely recognised, both within the UK and abroad. Student achievement is also recognised through initiatives such as the Higher Education Achievement Report or equivalent, kitemarks, or the accreditation of Professional, Statutory and Regulatory Bodies (PSRBs). In this evolving context, it will also be
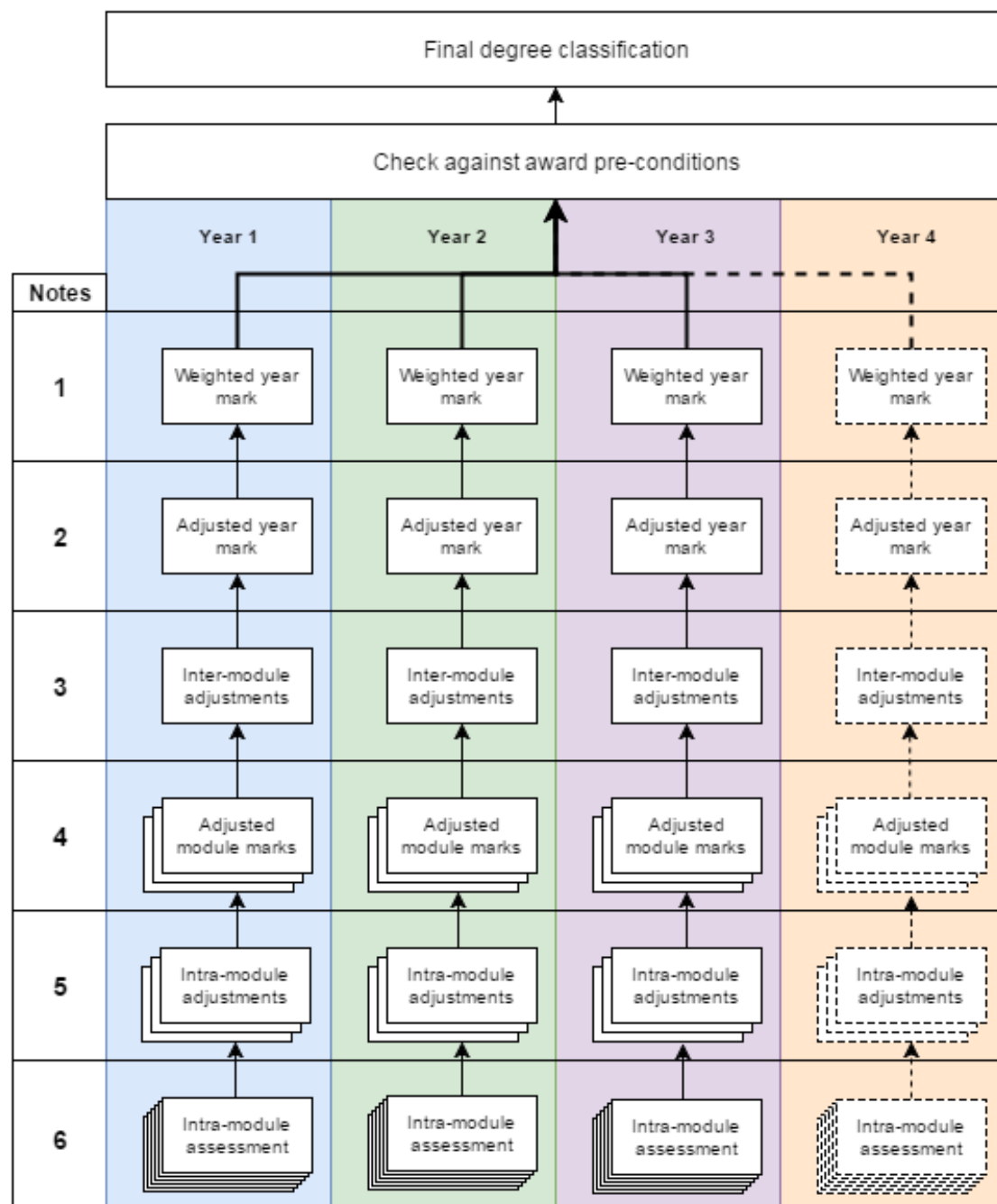
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4 Oxford Magazine no. 269 (Fifth week, Michaelmas 2007), p.pp 8–-10

important to ensure that the honours degree classification remains a useful tool for classifying attainment.

BASIC MODEL

The diagram below sets out a basic model for a degree algorithm for a three- or four-year undergraduate degree with a modular structure. Further detail is provided in the text below the diagram.

Notes	Year 1	Year 2	Year 3	Year 4
	Final degree classification			
	Check against award pre-conditions			
1	Weighted year mark	Weighted year mark	Weighted year mark	Weighted year mark
2	Adjusted year mark	Adjusted year mark	Adjusted year mark	Adjusted year mark
3	Inter-module adjustments	Inter-module adjustments	Inter-module adjustments	Inter-module adjustments
4	Adjusted module marks	Adjusted module marks	Adjusted module marks	Adjusted module marks
5	Intra-module adjustments	Intra-module adjustments	Intra-module adjustments	Intra-module adjustments
6	Intra-module assessment	Intra-module assessment	Intra-module assessment	Intra-module assessment

A broad definition of module has been used in this report. It is taken to mean a unit of study that can be combined to form a course or programme.

	Description	Page number
1	<u>Weighted year mark</u>: the adjusted year mark with the year weighting applied. For example, a final award classification might not include first year results (in this instance, the first year would have a weighting of zero).	25
2	<u>Adjusted year mark</u>: the total mark for the year once inter-module adjustments have been made.	33
	Discounting is the practice of not counting module marks towards a final degree classification. This practice varied within institutions, as well as between them.	37
3	<u>Inter-module adjustments</u>: these adjustments are made between modules. Three examples are considered below:	
	Aggregation and **averaging** of marks into an overall year average can blur differences between individuals. For example, an individual who consistently performs at a moderate level might get the same final mark as one who performed exceptionally in some modules and less well in others if modules are equally weighted. The award of honours may mitigate this problem to a small extent as degree algorithms can enable differentiation, when this is considered desirable by differentially weighting years within the degree and modules within a year.	28
	Compensation is another way in which institutions mitigate poor performance in a module or between modules. Poor performance in one or more modules is offset by considering the score against satisfactory performance in other modules.	36
	Condonement reflects institutional acceptance that the failure of a module does not disqualify the student from eligibility to the target award.	36
4	<u>Adjusted module marks</u>: total mark for the individual modules once intra-module adjustments are made. **Reassessment**, for example, will lead to a revised module mark.	42
5	<u>Intra-module adjustments</u>: these are adjustments made within the module itself. For example, students might be allowed an alternative form of assessment (such as coursework). Reassessment may also be permitted.	42

6	<u>Intra-module assessment</u>: This is the assessment or assessments that comprise a modular mark. The balance between the weightings of individual items of assessment such as written coursework, written examinations and other forms of assessment within modules will vary by discipline and subject.	43

The specific components of the degree algorithm have been identified through the scoping activity that was undertaken before this project started. Additional components were identified as the work progressed.

POLICY CONTEXT

GRADE IMPROVEMENT

The number of students obtaining a first-class degree (1st), as a proportion of students obtaining a classified degree, has risen in the recent history of the sector, from 12.6% in 2006–07 to 23.6% in in 2015–16. Over the same period, the proportion of students obtaining an upper second class (2:1) degree has remained steady, meaning that the proportion of students obtaining a 2:1 or a 1st has risen from 60.2% to 73.2% of all students obtaining a classified first-degree qualification. This trend pre-dates the current system of student finance, with improvement observed in the data from the early 1990s.[5]

This is not unique to the UK. For example, the rise in the number of students receiving an 'A' grade in the United States has been investigated by Stuart Rojstaczer, who, after analysing data from over 400 schools and over 4 million graduates found that grade point averages have risen at the rate of 0.1 points per decade over the past 30 years. The implication is that 'an 'A' has become ordinary' – it is the most common type of qualification awarded.

There are likely to be multiple drivers behind this trend. This report considers the potential impact of degree algorithms on this trend, based on the responses received from institutions and the qualitative interviews undertaken.

NEW ENTRANTS TO THE SECTOR

In England, one of the objectives of the Higher Education and Research Act is to facilitate the entry of new providers into the higher education system. The impact assessment undertaken by the government forecasts an increase in the number of registered and approved alternative providers of higher education. The impact assessment of the Higher Education and Research Act estimated there will be 118 alternative providers with degree awarding powers by 2017–18.[6]

The UK government expects that some of these alternative institutions will offer new types of courses. Although the Quality Code will continue to establish the baseline for describing and assuring standards, the sector itself is likely to become more diverse in terms of the style of provision. In practical terms, this means that the range of academic regulations is likely to become wider to accommodate new teaching models and pedagogic practice.

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[5] https://www.sheffield.ac.uk/polopoly_fs/1.679105!/file/2014_C1_1_Bachan.pdf
[6] Impact Assessment; Higher Education and Research Bill 2016 (Department for Business, Innovation and Skills)
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/524517/bis-16-264-he-research-bill-impact-assessment.pdf

The research underpinning this report has included some interviews and dialogue with existing alternative institutions and anticipates some of these changes.

THE NEW REGULATORY ENVIRONMENT

The challenges posed by concerns over the maintenance of quality and standards, in the context of an expanding higher education sector have implications for providers and sector stakeholders. This includes the creation of the Office for Students in England, which will, among other things, designate sector-owned bodies to undertake quality assurance and data collection functions.

The planned further development of the Quality Code, overseen by the UK-wide Standing Committee for Quality Assessment, represents an opportunity to ensure that the Code remains an important UK-wide reference point for quality and standards that recognises challenges and changes within the sector.

NATIONAL CONTEXT

UNITED KINGDOM

The framework for academic quality and standards is set by the UK Quality Code for Higher Education, jointly developed by the Quality Assurance Agency and higher education providers, and overseen by the UK Standing Committee for Quality Assessment. The UK Quality Code establishes the baseline for describing and assuring standards within higher education.

ENGLAND

In common with the devolved nations, the central structural feature of the higher education sector in England is that institutions have a relatively high degree of autonomy in comparison with other countries. Qualifications offered from English institutions operate under the national framework: the Framework for Higher Education Qualifications (FHEQ). Typically, undergraduate degrees are three years long, and most new entrants into higher education are aged 18.

NORTHERN IRELAND

The structural features of higher education in Northern Ireland closely resemble those in the other devolved nations: higher education institutions are autonomous and self-governing. Quality assurance for pre-higher education qualifications offered in Northern Ireland is regulated by the Council for the Curriculum, Examinations and Assessment (CCEA).

SCOTLAND

Scotland's education system has developed in divergence with the other national education systems in the UK (Wales, England, Northern Ireland). This divergence has given Scotland pronounced traditions, particularly where higher education is concerned. The Scottish Credit and Qualifications Framework (SCQF) uses two measures: level of a qualification and the number of credit points given for that qualification, allowing comparison between the level of Scottish qualifications within the Scottish national framework. Notably, many (although not all) students begin higher education aged 17 (as opposed to 18, which is the norm across the rest of the UK). The earlier entrance age also explains the prevalence of four-year degrees.

WALES

The structural features of higher education in Wales closely resemble those in the other devolved nations: Welsh higher education institutions are autonomous and

self-governing. Like Scotland, a separate framework exists for Welsh qualifications only: The Credit and Qualifications Framework for Wales (CQFW) which provides a common point of comparison for qualifications offered by Welsh higher education institutions. Welsh institutions must adhere to the UK Quality Code for Higher Education.

METHODOLOGY

REVIEW OF EXISTING LITERATURE AND RESEARCH

A review of the existing literature and research was undertaken at the initiation of this project. A list of some of the resources that were considered is set out in the annexe of this report, under resources. Practitioners wishing to gain a greater understanding of practice within the sector may wish to use these resources to inform and frame discussions in their institution.

SURVEY DESIGN

The review of existing literature and research confirmed that a sector survey was required to capture current practice across the UK. The survey was designed through consultation with sector practitioners and sector representative groups, including Universities Scotland, Universities Wales, the Association of Colleges and Independent Higher Education. Different versions of the same survey were developed for English, Scottish and Welsh institutions to reflect national contexts. The two universities in Northern Ireland were engaged directly.

SECTOR SURVEY

120 responses were received, including 93 institutions based in England, 17 based in Scotland and seven based in Wales. Two further responses were included from Northern Ireland based on interviews carried out with those institutions and a review of their academic regulations. Several institutions were approached informally where responses were not clear or required clarification. The exact number of enquiries to individual institutions was not recorded.

INTERVIEWS

15 interviews were held in confidence with individual institutions, and these are reflected in the case studies presented in this report. Interviews provided further context to the findings of the survey responses and insight into institutions with distinctive characteristics. This included institutions who had recently been awarded degree awarding powers, those offering specialist provision and those subject to validating partnerships.

ENGAGEMENT EVENTS

Emerging findings and conclusions were tested with sector bodies and groups over the length of the project. The project team is indebted to the Academic Registrars Council, in particular the engagement of the Assessment Practitioner Group and the

Quality Assurance Practitioner Group, as well as the QAA Teaching Quality Forum and the Learning and Teaching Advisory Group. A further engagement event was organised at the University of London in June 2017.
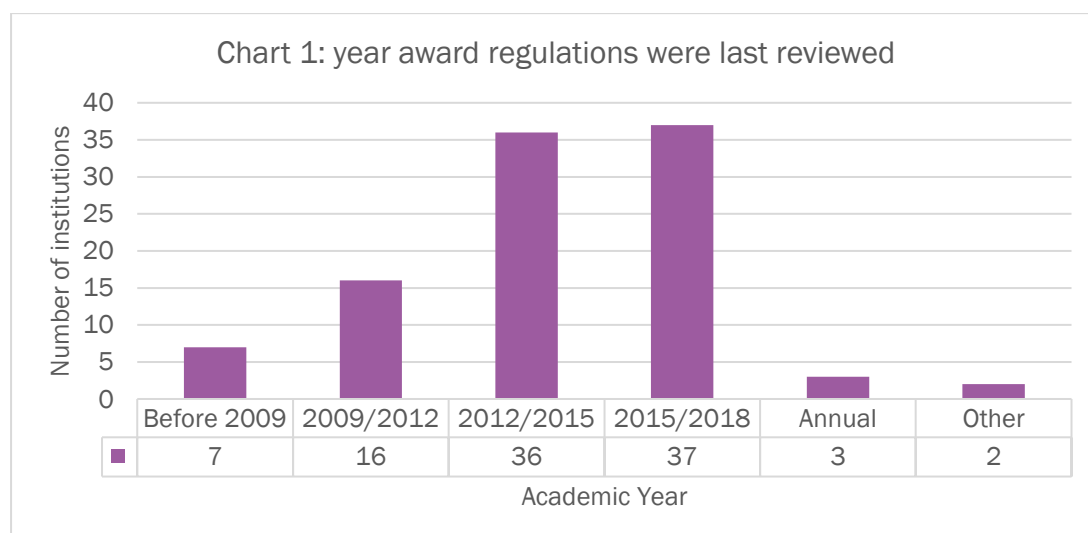
CHANGES TO AWARD REGULATIONS

This section sets out how frequently changes are made to academic regulations generally, and degree algorithms specifically, and the reason why changes have been made. It is divided into three sub-sections:

a. when providers last reviewed their award regulations

b. the changes that were made to the award regulations

c. why changes were made

It finds that institutions regularly review award regulations as part of reviews of wider academic regulations. More recently the majority of changes have tended to focus on reassessment rules and credit architecture. Although these dimensions are likely to impact the grade profile of an institution technically, they do not form part of the degree algorithm. In general, changes were justified by amendments to pedagogical practice or to standardise practice across the institution.
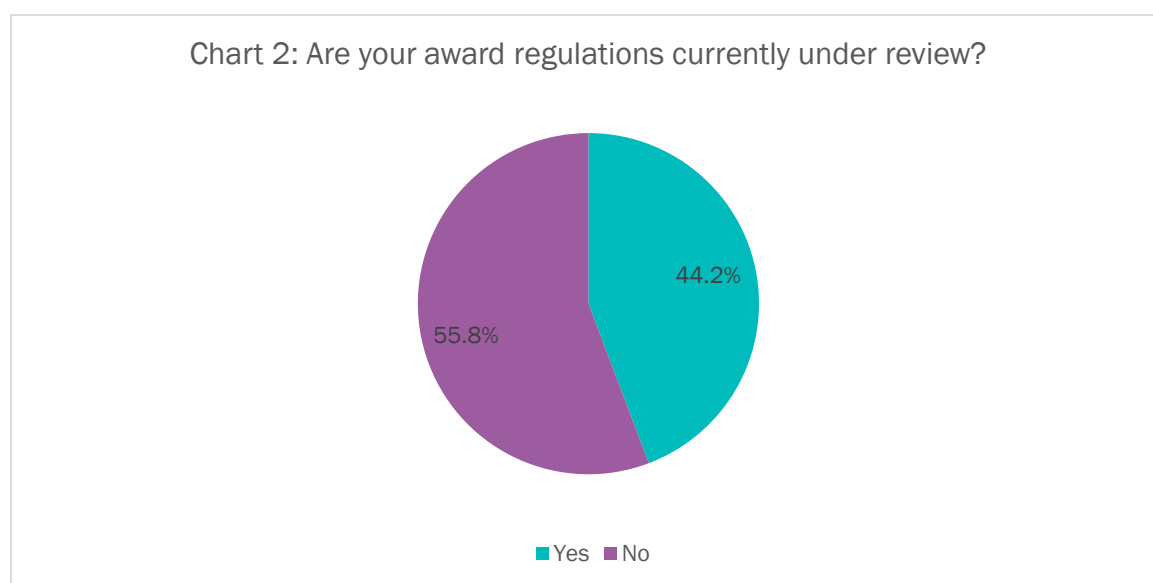
LAST REVIEW OF AWARD REGULATIONS

Respondents were asked to indicate when they last reviewed their award regulations. 101 responses were received to this question, and these are set out in Chart 1 below. The majority of institutions, 71 (70.3%) had reviewed their award regulations at some point in the last five years.

Chart 1: year award regulations were last reviewed

	Before 2009	2009/2012	2012/2015	2015/2018	Annual	Other
	7	16	36	37	3	2

Three respondents indicated that their institution reviewed their award regulations on an annual basis, but it is likely that the number of institutions undertaking some

sort of review is higher than this. A small number of institutions last reviewed their regulations before 2009.

Respondents were also asked to indicate whether their award regulations were currently under review. 104 respondents replied to this question, with 46 (44%) indicating that their institution was currently reviewing their award regulations. The engagement activity undertaken as part of this project found that several institutions had postponed a review of practice because this work was being carried out. It is likely that, in the absence of this review, that over half of the higher education providers captured in this study would be undertaking some sort of review of award regulations.

Chart 2: Are your award regulations currently under review?

44.2%
55.8%

■ Yes ■ No

The 46 respondents who indicated that their award regulations were under review were asked to comment on the scope of this review. 39 institutions responded to this question and the responses are summarised in Table 1, below.

Table 1: Scope of review of regulations currently underway

Response	Number
Review of credit or credit framework and assessment regulations	12
A review of the regulations is now due	11
Simplification or standardisation of process	7
Review of regulations on progression and grade boundaries	4
Introduction or alteration of compensation or condonement rules	2
Normalisation of practice	2
Review of graduate grade profiles	1

CHANGES MADE TO THE AWARD REGULATIONS AS PART OF THE LAST REVIEW

Respondents were asked what changes were made at the last review, and could select from a fixed set of multiple choice responses, submit a free text response, or both. Respondents were able to select more than one option. The most common selection was 'changes to reassessment rules' with 37 institutions across the UK selecting this option. 'Changes to credit architecture' was the second most selected option (29). While changes to reassessment rules and credit architecture are likely to impact on the grade profile of an institution, these sit outside of the algorithm itself.

In total, eight (8%) institutions did not make changes resulting from their review of award regulations. A full summary of responses is in Table 2, below.

Table 2: Changes made as part of the last review of award regulations (UK, n=100)

Response	Number
Changes to reassessment rules	37
Changes to credit architecture	31
Standardisation across faculties or departments	21
Changes to marking schemes	16
No changes were made	8
Total	**110**[*]

[*] Respondents could select more than one response, and the total exceeds the number of respondents.

Standardisation across faculties or departments may include adjustments to the degree algorithms, and this practice has been driven by external initiatives and drives to ensure that students are subject to the same regulations.

60 institutions opted to use the free text box. The most common change identified was a change to the degree algorithm, with 36 respondents indicating that there had been an adjustment. Nine responses were already covered in an existing category, and a further nine responses referred to practice outside of the scope of this study. A further six unique responses were included, these covered clarification of existing practice; changes to academic discretion; the adoption of a grade-based system; clarification of the expectations of academic boards; and, the introduction of a 'fit to sit' policy. A remaining response could not be categorised.

WHY DID YOUR INSTITUTION MAKE THESE CHANGES TO THE DEGREE ALGORITHM?

To ensure that the widest possible range of responses was included in the survey, respondents were given a free text box to comment on reasons why changes were made to the degree algorithm. This flexibility means that the collected responses to this question are more diverse than other questions in the survey, but they can still be grouped into broad categories. 98 responses were received, and these are summarised in Table 3 below.

Table 3: the reasons changes were made to an algorithm

Response	Number
Standardisation across an institution	27
Pedagogical rationale	22
No changes	20
Competitor or sector alignment	14
Simplification of existing regulations	9
To reduce the proportion of good honours awarded	5
Other	7

The responses reveal that a process of standardisation within institutions is still ongoing. A sub-set of these institutions, 20, made changes to ensure that students were being treated equitably within the institution.

With the exception of standardisation within an institution, the most commonly cited reason was adjustments made on pedagogical grounds. This might be, for example, an increased emphasis on 'exit velocity' where institutions place greater weight on the final year, or years, of the programme. Of the 22 (22.4%), seven identified a desire to recognise exit velocity.

In total, 20 (20.4%) respondents indicated that their institution had not made any changes to the award algorithm. This includes the eight institutions who had not made any changes to their academic regulations at all. 14 (14.2%) of respondents indicated that they had made changes to align practice with competitors or the sector. This is a broad category, which captures changes that were made in response to feedback from external examiners or to normalise practice so that it is consistent with the rest of the sector.

The 14 institutions who indicated that changes were made for sector alignment purposes were informally approached. This further investigation, and interrogation of the submitted responses suggests that the motivations for alignment are more benign than previous coverage of this issue has suggested. Institutions look to other

institutions with a similar profile of students as a means of refreshing regulations in line with best practice, and to remove inappropriate barriers to student success. Institutions should be aware of their obligations as autonomous degree awarding powers. Decisions about degree algorithms, though they may be informed by sector practice, must be made by the institution on academic grounds.

THE PROCESS OF CHANGING DEGREE ALGORITHMS

Five institutions that had revised their degree algorithms in the last three years were approached to explore the change process in greater detail. This included what provoked consideration of changes, the options that were considered, what bodies had to be consulted for change(s) to be approved, and the process for implementing practice.

The possible reasons cited for a review of practice varied between external and internal drivers. Consistent with the results presented earlier in the report, individuals identified regular reviews of practice and feedback from external examiners as two of the reasons why a review might be considered. Other reasons a review might be trigged include a wide-ranging academic review of practice at an institution, or in response to student feedback or consultation.

ACADEMIC GOVERNANCE

In general, the institutions surveyed described a process that was driven by a project board designated by a body with an institution-wide remit, such as an academic senate. The project board would undertake an initial scoping exercise, capture practice within the institution and suggest potential changes that might be made to the algorithm.

Once the initial scoping work was undertaken, changes would be considered successively by departments, schools or faculties, and finally by a body with an institution-wide remit, such as an academic senate. One institution we spoke to gave each faculty responsibility for investigating specific areas of practice. Similar investigations elsewhere triggered a review, but the majority of institutions appear to consider changes as part of a regular review of practice, based on the responses received through the sector survey.
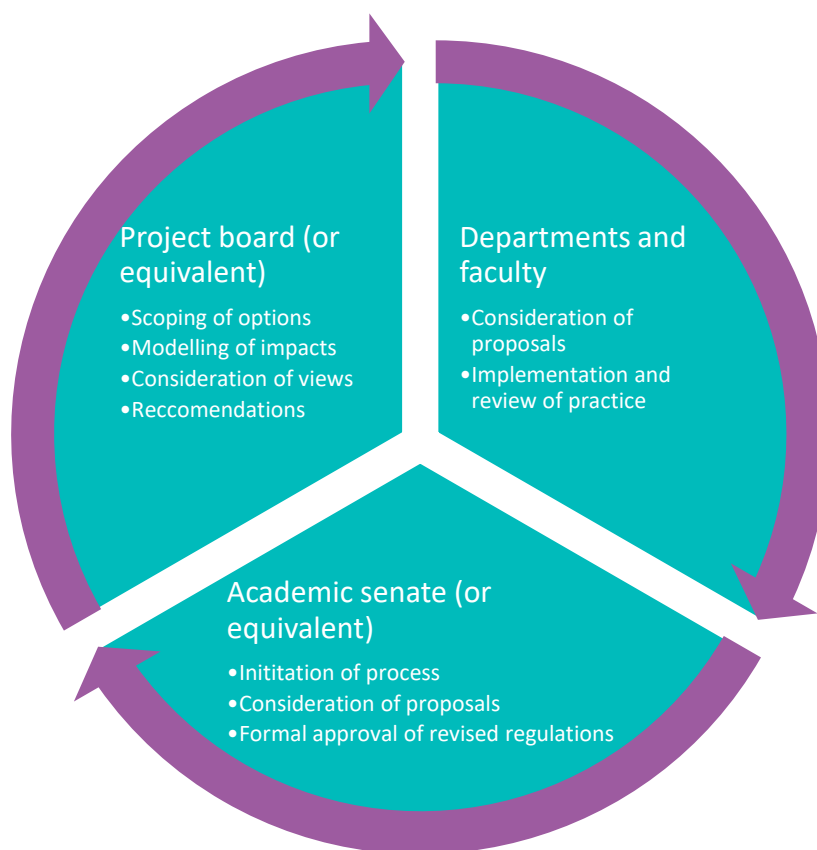
STUDENT ENGAGEMENT

All of the interviewed institutions included students in the process of gaining feedback on proposed changes, typically through student representative(s) on academic boards/committees who discussed changes and any amendments to the algorithm. Otherwise, a more direct process was used by holding student consultations (either through students' union representatives or surveys) in which feedback was gathered and relayed directly to academic quality boards/committees to be considered.

Those interviewed stressed that clarity of communication is crucial to ensure that students are fully aware of any change or changes that are being made, and how change might affect the degree classification they will achieve. In practice, changes are phased in where there is any doubt as to the impact on registered students. Any changes to academic regulations for enrolled students should be covered by fair terms and conditions agreed with students at the offer stage in order to comply with consumer rights regulations.

MODELLING IMPACT AS PART OF THE CHANGE PROCESS

Respondents to the sector survey were asked if their institution had modelled the impact of changes to the student body. Of the 99 responses received, 87 (87.9%) indicated that their institution had modelled the impact of changes. Although such modelling relies on past student performance and cannot anticipate change in student or staff behaviour, it has clear value to institutions making changes. Modelling results are influential in deciding whether a proposed change is accepted or not.

All the institutions spoken to undertook some form of modelling to assess the potential impact of changes on the student body. They were particularly interested in whether changes would disadvantage students, especially where changes might have disproportionate impact on certain student demographics. This would inform decisions on whether a proposed change would be introduced. Quantitative analysis was undertaken to determine whether proposed changes would make a material difference based on past student performance. For example, one institution that made changes ran a proposed degree algorithm across previous years.

DESIGN PRINCIPLES

When considering academic changes, institutions would be well advised to consider several factors. Firstly, before making changes, clearly defined objectives should be established as guiding principles to those changes. Equally, when the objectives are defined, the broadest range of options to achieve those objectives should be considered, in as neutral a manner as possible and adapted to the institution as much as possible. In several of our conversations, when scanning the sector for examples of best practice, what was salient was the adaptation of academic regulations to suit the institution in question (that is, its students, culture, pedagogy, discipline, and other characteristics).

KEY QUESTIONS TO CONSIDER WHEN MAKING CHANGES TO ALGORITHMS

Institutions will want to define their own change process when adjusting algorithms, but it is likely that there are some common questions that have applicability across the sector. These are set out in the box below.

- Why are changes being made? Do the changes fit with the wider mission of the organisation?

- Are the reasons for making changes transparent? Changes should be motivated by ensuring that the learning outcomes of students are fairly represented in the final award outcome, and that institutional practice is transparent and consistent.

- Is the likely impact of changes to algorithms understood? This includes the likely changes to degree outcomes in comparison to other institutions, potential impact on student study behaviours or borderline cases.

- Will proposed changes have a significant impact on the profile of the awards made? If the changes are significant, then the degree awarding power should be able to justify this change.

- Who has been involved in the process for making changes? Students should be involved in the decision-making process.

- The process should ensure that potential differential impacts on student groups and potential behaviours are mitigated.

- Has the algorithm, including the rationale for change, been clearly communicated? The design of the algorithm and the design rationale should be communicated clearly to students and academic staff, to ensure transparency and enable students to understand how their attainment is recorded.

- Have appropriate steps been taken to ensure that the implementation of the changes does not have a detrimental impact on registered students?

MERGERS

Mergers are complex processes, and in higher education they are further complicated by the need to reconcile differences in the ways that academic regulations are set out and interpreted. To smooth the process, any merger agreement or memorandum of understanding should consider the implications that the merger will have on the academic regulations of the institutions that are being merged.

CASE STUDY: SMALL AND SPECIALIST INSTITUTIONS

Three small and specialist institutions were contacted to ascertain how the provision they offer is reflected in their degree algorithm.

The small and specialist institutions that were interviewed tended to place more weight on the final year of study. In disciplines such as the performing arts, the dominant view is that students become professional practitioners of their discipline in their final year, after accumulating knowledge, expertise and skills in preceding years. This reflects the summative assessment that often occurs in the final year, which is usually a creative, independent project, and is the central component of a degree. This is the basis for the higher weighting for the final years of an undergraduate degree. This confirms that the specialist nature of the provision that small and specialist institutions deliver is incorporated into the algorithm. It is worth noting that this practice is not necessarily that different from multi-disciplinary institutions. The overwhelming majority of institutions place greater weighting on the final year of study.

The nature of assessment is different at the small and specialist institutions that are focussed on the creative or performing arts. Portfolios of assessment and an emphasis on 'continuous, formative assessment' is common but not exclusively restricted to these institutions. Assessment is also designed to be holistic in nature, with a broad emphasis on technical, professional and collaborative skills.

FINAL CLASSIFICATION RULES

This section describes how rules and regulations governing final classifications are calculated across an individual higher education provider. This might include, for example, the weight placed on different levels of the degree programme, whether final awards are based on grade profile or aggregate percentage mark, and the minimum number of credits required to graduate. Data on module-level regulations was collected (and is analysed in later sections); this section will consider rules that apply. Key findings include:

- There is an active and legitimate debate around weighting of different years and levels of study that is rooted in pedagogy, academic discipline and institutional mission.

- The clear majority of responses use aggregate percentage marks with the second-most popular option being a combination of aggregate percentage marks and grade profile.

- There is a clear consensus over the minimum number of credits required to graduate. There is an emerging consensus on the number of credits required to progress between years but this is dependent on other factors such as year weightings.

- The minority of institutions that only discount worst credits from a final mark should consider whether discounting should be applied to outliers at both ends of performance or justifying the rationale for only discounting worst credits.

UNIFORMITY OF REGULATIONS

Of the 112 responses received, 58 (51.8%) respondents indicated that their institution has institution-wide rules for determining the classification of the honours degree. A further 36 (32.1%) respondents indicated that their institution had exceptions for programmes that were accredited by PSRBs. 18 respondents indicated that their institution did not have consistent regulations at institutional level. Given the overall sector trends it is likely that many of these institutions will introduce institution-wide rules over time.

RELATIVE WEIGHTINGS

England, Wales and Northern Ireland

In total, 83 respondents provided 100 different approaches to the weighting given to different levels of the programme. The results presented in the table below set out the weightings applied to programme years for three-year undergraduate degrees.

Table 4: Presenting relative weighting of programme years

Category	Weighting			Number
	Year 1	**Year 2**	**Year 3**	
Exit velocity	0	0	100	8
Emphasis on exit velocity	0	20	80	6
	0	25	75	18
	0	30	70	13
	0	33	66	19
Split between Year 2 and 3	0	40	60	19
	0	50	50	8
Inclusion of Year 1	10	30	60	4
	11.1	33.3	55.6	2
	11.1	44.4	44.4	1
Even split	33.3	33.3	33.3	1

76 (92.1%) of respondents do not include Year 1 in the calculation of the final degree classification. The seven institutions that include Year 1 in an algorithm have introduced this relatively recently. There is a live debate in the sector about the relative pros and cons of inclusion in Year 1 in the final degree classification, and it is likely that the number of institutions including Year 1 in the final degree classification will increase. The single institution reporting an even split across years does not technically provide a final award to its students, and so it is not considered in the same group as the seven that have decided to include Year 1.

The table clearly shows that all institutions continue to place greater weighting on the final years of the programme, reflecting to a lesser or greater extent the idea that the final classification should reflect the 'exit velocity' of the student, or the standard that the student is performing at as they graduate from the institution.

The range of practice reflects a deep-seated divergence of views regarding what constitutes 'best practice' when setting the relative weighting. On one hand, certain academic practitioners believe that the final year reflects the best and most important performance of a student's undergraduate degree – the skillset the student leaves with. Conversely, there are those who consider that the best way to structure student incentives and actively engage students with the curriculum is to include modules from across more than one level of study (most commonly Year 2 and Year 3). The justification for this is that there is more active engagement from the learner when

the marks contribute to the final classification. Such practice might also lead to a reduction in risk-taking.

Ultimately, the weighting of programme years is an academic decision, and rests on what the institution is trying to achieve. If an institution aims to encourage deeper engagement across the degree, it may choose to spread the programme year weighting. If an institution places a greater emphasis on inculcating students to the requirements of university study, for example where a large proportion come from widening participation backgrounds, it may not give weighting to the first year. Finally, an institution, or disciplines such as arts, may emphasise attainment at the point of departure from the institution and place greater weighting on the final year.

Eight institutions used more than one algorithm as standard. It was common practice to award students the highest award classification from the two (if applicable). Further interviews with institutions that employed multiple degree algorithms found that although they may have a significant impact on individual students, they appear to have a limited impact on the overall profile of awards made. The use and employment of multiple award algorithms is considered in greater detail in the 'Adverse, mitigating and extenuating circumstances' section of this report.

Scotland

In Scotland, four-year degrees are more common than the three-year degree found in the rest of the UK. This data is presented in Table 5, below. The most common form of practice is to calculate the final award from the final two years of a Master of Arts (Hons) degree with varying levels of emphasis on the two years.

Table 5: Relative weighting of programme years (Scotland)

Category	Weighting				Number
	Year 1	**Year 2**	**Year 3**	**Year 4**	
Exit velocity	0	0		100	5
Emphasis on exit velocity	0	0	30	70	1
	0	0	40	60	1
Split between Year 3 and 4	0	0	50	50	5
Even split	25	25	25	25	1

While the four-year degree programme in Scotland is distinctive, the programme weightings reflected the shared understanding in the UK that the final degree classification should reflect the exit velocity of the student.

CASE STUDY: INSTITUTIONS THAT HAVE RECENTLY ENTERED THE HIGHER EDUCATION SECTOR/GAINED DEGREE AWARDING POWERS

The main motivation for approaching institutions that had recently acquired degree awarding powers was to establish what design principles had been considered, particularly for those institutions whose provision had previously been validated by another degree awarding power, when constructing academic regulations.

The institutions interviewed had typically engaged with more than one validating institution, and therefore had experience of multiple validation or franchising agreements. This experience meant that they could potentially adopt best practice from multiple institutions.

In practice, the interviewed institutions used the existing structure of academic regulations as a base model to refine regulations to make them more suitable for the profile of the institution. Rather than developing the degree algorithm from scratch, the institutions reported that the regulations had not changed to any major extent since their validated provision ended and they gained their own degree awarding powers.

This is to be expected given the nature of the relationship between the validating institution and the validated institution, which was reported to be highly flexible and fluid; in most cases the validated institution wrote their own policies and regulations with approval from the external institution (there were certain exceptions, however).

In one instance of an institution modifying its academic regulations, a rule limiting the number of credits for which reassessment could be granted was scrapped, but retaining the number of reassessments allowed. This was ascertained from detailed experience of individual student cases. When academic regulations had to be developed, the institution looked to best pedagogical practice within the sector.

In the case of institutions that operated under validated provision, they had 'two-tiered' student bodies:

(i)   students who were studying for degrees validated by an external university

(ii)   students enrolled on courses to be awarded by the institution itself or other awarding bodies

WHAT ARE FINAL DEGREE CLASSIFICATIONS PRIMARILY BASED ON?

Respondents were asked on what basis final degree classifications were made. 112 responses were received, with 67 (59.8%) respondents indicating that their institution based the final degree classification on aggregate percentage marks. 22 (19.6%) respondents indicated that classifications were based on a combination of aggregate percentage marks and a profile of grades, while 6 (5.4%) respondents indicated that a profile of grades were used.

17 respondents chose to submit a free text response, and 16 of these responses are summarised in the table below. The single response omitted from the table indicated that degrees are not classed by the institution.

Free text responses mainly related to instances where none of the fixed set were applicable, the responses of which are available in Table 6.

Table 6: list of 'other' responses (final degree classifications)

Response	Number
Weighted aggregate percentage marks (arithmetic mean)	7
GPA and grade profile	4
Conversion of module grades into median or mean	2
Standardised marking scale, involving conversion of 'raw marks'	1
A combination of the approaches	1
There is variation across programmes	1

There is an expectation that the number of institutions using grade-based assessment in preference to aggregate percentage marks will increase over the next few years, based on live conversations in the sector. The use of grade-based assessment offers possible solutions to some of the issues that institutions are grappling with, including the use of the full marking scale and possibly over borderline cases.

THE MINIMUM NUMBER OF CREDITS A STUDENT MUST PASS TO GRADUATE

Among UK institutions (excluding Scotland), the most common minimum number of credits a student requires to graduate is 360 credits, with 55 institutions specifying this number (58%, n=98). The sector norm requires students to pass the full complement of credits available to them. There was a similar picture in Scotland: 14 institutions (82%, n=17) stated that 480 credits are required for students to graduate.

A further nine institutions in the UK (excluding Scotland) required 360 credits to be passed, but also had provision for compensation or condonement to be applied within a maximum range of credits.[7] There are other studies that look specifically at compensation and condonement, which suggest this practice might be more common than this figure suggests, and the responses that are explored in greater detail in the programme level rules section of this report appear to confirm that.

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[7] Some respondents specified that level six credits are excluded from compensation or condonement.

CASE STUDY: INSTITUTIONS THAT HAVE REVISED THEIR DEGREE ALGORITHMS IN THE LAST THREE YEARS

Four institutions that changed their degree algorithm(s) in the last three years were interviewed. The purpose of these interviews was to understand why the degree algorithm had been revised, and the significance of these changes.

The most common changes were amendments to how the final degree outcome is calculated (through relative weightings and/or discounting credits). For instance, altering the number of 'best' credits that were used across Year 2 and Year 3 was one example as part of a range of measures. This practice of discounting outliers (referred to as 'discounting') is one way of ensuring that the final award reflects consistent performance. Intuitively, where such practice occurs, it would involve discounting outliers at either end of achievement.

In a small number of instances, some institutions were tightening the rules by making it more difficult for students to gain a 'good' honours degree.' One institution began using the full marking scale (0–100) from 0–70 across the board; as expected, this led to changes in the profile of degree classifications. The greater use of the full marking scale across the sector is very likely to increase the proportion of first and upper second degrees awarded, but sits outside of the algorithm itself.

Other changes included limiting the discretionary powers of examination or assessment boards to vary degree classifications. This was done to achieve greater consistency by introducing a rules-based approach whereby variation is permissible only when set conditions are met.

As expected, changes to degree algorithms were limited in scope; refinements to an already existing system/structure were introduced, rather than wholesale changes. While academic reviews were more wide-ranging, changes resulting from them were limited.

PROFESSIONAL, STATUTORY AND REGULATORY BODIES

The role of Professional, Statutory and Regulatory Bodies (PSRBs) and their influence on academic regulations was highlighted in the scoping work undertaken for this project. PSRBs are responsible, among other things, for regulating standards of entry into professions. The Quality Assurance Agency works with PSRBs to make this regulation more efficient.[8]

Individual providers have generally standardised academic regulations, bringing faculty and department-level rules into line. This is not possible where a programme is accredited by a PSRB that sets conditions for the degree algorithm used.

PSRBS THAT IMPACT DEGREE ALGORITHMS

Across the UK, 48 respondents indicated that their degree algorithms were influenced by PSRBs as part of the accreditation process. The PSRBs most commonly identified by respondents were in the fields of health and social care, law, engineering, and architecture. This was not surprising, as entry to these professions is relatively heavily regulated.
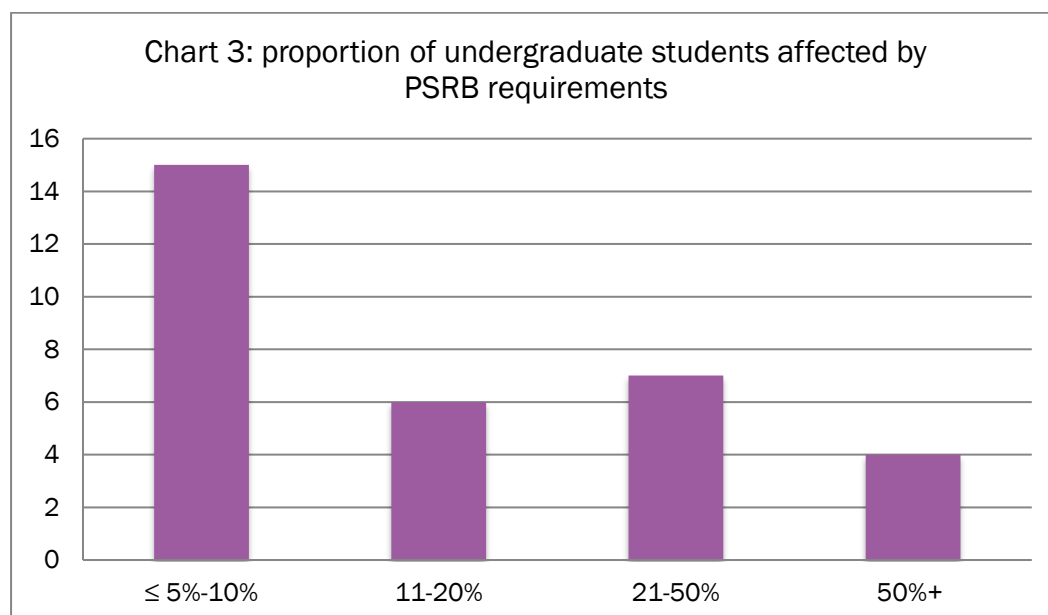
Interestingly, the number of respondents indicating that their degree algorithms were influenced by one or more PSRB was lower than the total number of institutions that offer programmes accredited by PSRBs. There could be several reasons for this – it is possible that the respondent was unaware of the PSRB's requirements, works with multiple PSRBs, or that different institutions are interpreting the requirements of the PSRBs in different ways. It has not been possible to arrive at a firm conclusion on this issue, and it is likely that there is no single answer for the sector. Institutions may wish to review this specific area of practice and assure themselves that the requirements are being applied consistently across the sector.

PROPORTION OF UNDERGRADUATE STUDENTS AFFECTED BY PSRB REQUIREMENTS

32 respondents replied to a question about the proportion of undergraduate students affected by PSRB requirements (Chart 3, below). The low number of responses suggests that the data was not immediately available to the respondent.

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[8] http://www.qaa.ac.uk/partners/professional-bodies

Chart 3: proportion of undergraduate students affected by PSRB requirements

Category	Value
≤ 5%-10%	15
11-20%	6
21-50%	7
50%+	4

THE NUMBER OF PROGRAMMES SUBJECT TO THE REQUIREMENTS OF A PSRB

Respondents were asked how many programmes at their institution were subject to the requirements of a PSRB. In total, 38 responses were received, and these are reflected in Chart 4, below.

Chart 4: number of programmes subject to the requirements of a PSRB

Category	Value
≤ 5	14
5 -20	6
20-30	4
30-50	3
50+	11
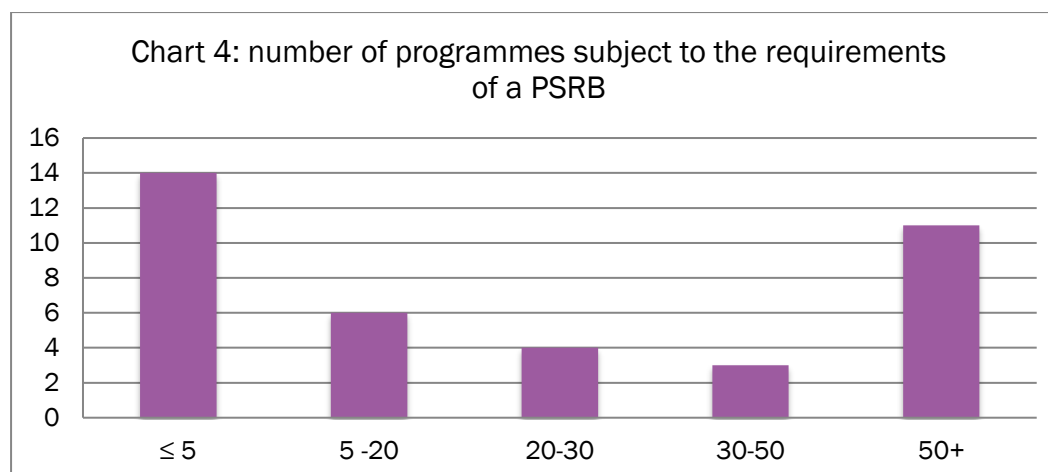
PROGRAMME-LEVEL RULES

This section focuses on programme-level rules, such as minimum requirements to progress to the next academic level, criteria to be offered reassessment, and dealing with failure. These themes were explored to capture how academic regulations – with broader scope – impact degree algorithms, and test for diversity or uniformity. Reassessment rules, as they impact on the algorithm, were non-restrictive, with many institutions specifying no minimum criteria at programme level.

MINIMUM PROGRAMME-LEVEL CRITERIA FOR REASSESSMENT

Respondents were asked what minimum programme-level criteria students needed to satisfy in order to be offered reassessment. Of the 99 responses received, 72 (72.7%) indicated that there were no minimum programme level criteria, but there was a maximum number of credits that could be re-taken. The remaining responses related to the academic standing of the student – which would include items such as minimum criteria around prior attendance, prior academic attainment or general stranding within the institution – or requirements such as an average mark being met. Just two respondents indicated that reassessment was not offered.

OPPORTUNITIES TO RE-TAKE OR REPEAT FAILED, COMPULSORY CREDITS IN SUBSEQUENT YEARS OF STUDY

The responses to this question proved difficult to categorise due to the highly varied nature of responses, each with their own nuances and specificities. In total, 70 institutions (64.8%, n=108) in some way permit failed compulsory credits at a lower level of study to be re-taken in the next academic year. However, many of these institutions had the proviso of a maximum number of credits that could be retaken (typically 40 credits across the academic year).

There was a great deal of variation in the circumstances where this would be allowed and the conditions required. In total, there were seven different policies/criteria that allowed for this. Most common was that institutions placed a limit on the number of credits that students could retake the next academic year. If the level of failure is such that this limit would be exceeded, students do not progress to the next academic level. Unsurprisingly, respondents cited concerns over the workload of students if this policy was applied indiscriminately.

Other points of note:

(i)   Bachelor of Laws students were a common exclusion from any institutions that permitted failed, compulsory credits to be retaken in the next academic year (likely due to PSRB requirements).

(ii)   There was variation in rules across academic levels. There is greater scope for retaken lower-level credits at level four and level five, but level five credits are not generally allowed to be retaken at level six.

Table 7: number of institutions permitting failed, compulsory credits to be retaken in the next academic year
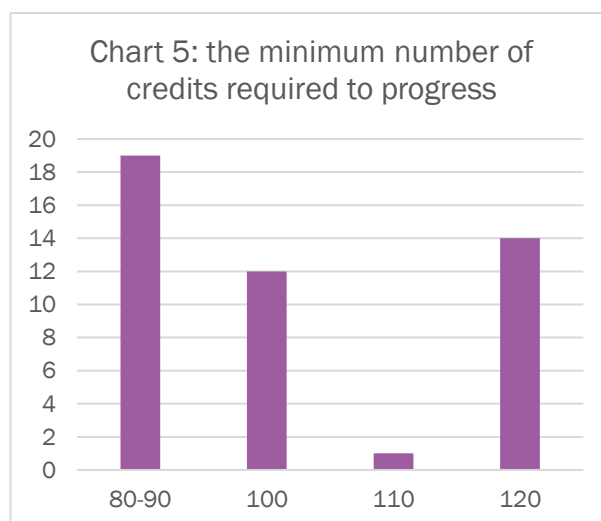
Response	Number
Yes, with the proviso that a minimum number of credits have been achieved at the current level *or* several other (unspecified) number of conditions have been met. Students can progress to the next academic level, with the assessment associated with the repeated module taking place either in the following summer or running concurrently with studies in the next academic level.	11
Yes, if students have reassessment attempts remaining, but there are a maximum number of credits that can be retaken in the next academic year while progressing.	10
Yes, without any restrictions (apart from PSRB requirements or compulsory modules).	10
Yes, however students are not allowed to progress into the following academic level without passing failed, compulsory credits.	8
Yes, but students would not normally progress to the next level of study (the student is effectively intercalating).	4
Yes, credits may be trailed but if the limits depend on the level of study for progression. Progression with trailing credits is not allowed into advanced stages of study.	4

25 institutions stated that if a student had not passed or been compensated for all credits, they could not progress to the next stage of study. In such situations, students were generally expected to retake the academic year or resit failed modules in the summer in order to progress to the next level of study. For one institution, rules varied between programmes and depended on module prerequisites.

THE MINIMUM NUMBER OF CREDITS THAT A STUDENT MUST PASS TO PROGRESS

Respondents were asked if there are a minimum number of credits that a student must pass to progress between levels of study. In total, 105 responses were received, with 99 (94.3%) respondents indicating that there was a minimum number of credits.

46 respondents provided specific information on the amount of credits required to progress to the next academic year, and this is set out in Chart 5. Note that these numbers relate to progression between programme years, so do not capture the final degree of the programme.

Chart 5: the minimum number of credits required to progress

15 institutions stated that the minimum number of credits varies by level. While there were some outliers, practice appears consistent, and variation is likely to relate to other elements of practice. As with other questions in this report, responses are also likely to capture a range of exceptional practice that is theoretically possible but in practice limited.

Table 8: credit ranges required for progression (by level of study)

Field	Range
Year 1 → Year 2	80–120
Year 2 → Year 3	210–240
Year 3 → Year 4 (where applicable)	340–360

Among the unique academic regulations was one university using a minimum GPA or a minimum average percentage across the level for progression.

DEALING WITH STUDENT FAILURE

Respondents were asked how the institution dealt with student failure and whether this was determined solely by the student's performance in failed modules, or whether the consequences could be influenced by the student's performance in other credit-bearing work. The consequences of failure are, for example, withdrawal from the institution; reassessment; progression with condonement and/or compensation; progression with a concession to repeat the module the following year; or a concession to repeat the whole year of study.

Respondents were provided with the option of selecting a fixed set of multiple-choice responses and a free-text response for comment. Of 104 responses, 63 (59.4%) indicated that the consequences of failure were determined solely by the student's performance in such modules. 40 (37.7%) respondents indicated that the consequences could be influenced by the student's performance in other modules. Three respondents selected 'Other' and offered a qualified response.

THE THRESHOLD LEVEL OF ACHIEVEMENT THAT MUST BE ATTAINED BEFORE COMPENSATION OR CONDONEMENT CAN BE APPLIED

Institutions within the sector use the definitions 'compensation' and 'condonement' in different ways. To understand practice across the sector, definitions for compensation and condonement were provided within the survey and respondents were asked to use these definitions, which are explained in the glossary of this report.

The responses to this set of questions polarised the sector, and even where condonement and/or compensation is applied, it is applied in different ways. This study has sought to address the full range of practice relating to degree algorithms, and has not considered this area in detail. However, the practice of compensation and condonement is the subject of several studies into this area, most notably by the Student Assessment and Classification Working Group. A further study, *Aspects of credit practice in English and Welsh universities,* is expected to be published on 16 October 2017, and contains more detail on this area of practice.[9]

The difference in views within the sector likely reflects the different ways in which programmes and courses are structured. For example, while the use of compensation is widespread, especially within a module, the use of condonement which mitigates failure between modules is less so. This may relate to the ways in which programmes are structured and how learning outcomes are achieved.

Condonement and compensation is an area of practice that could be usefully included in the design principles set out in the Quality Code, based on a shared sector understanding of what practice is intended to achieve. This would include a set of common definitions and principles. Common practice recorded in the sector survey included:

(i)   limiting the number of credits that can be condoned/compensated

(ii)   restricting condonement and compensation to modules at level four/level five and to non-core (non-compulsory) modules

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[9] www.seec.org.uk/about-us/ukcf

WHETHER STUDENTS CAN RE-SIT FAILED, FINAL YEAR CREDITS

It is common for students to be allowed to re-sit credits failed in the final year of the programme, with 91 of 105 respondents (86.7%) indicating that this was allowable under their academic regulations. Where regulations do not allow students to re-sit failed, final year credits, institutions may wish to consider why different rules for the final year are necessary.

WHETHER THE ALGORITHM USES ALL CREDITS OR SELECTS A SMALLER NUMBER OF CREDITS

Respondents were asked whether all 120 credits or equivalent were used to assess performance at the programme level, or whether a smaller number of 'best' credits were used. Of the 106 responses received, 60 (56.6%) indicated that all 120 credits are included in the question.

25 (23.6%) of respondents indicated that a smaller number of best credits were used. This mechanism of 'discounting' is intended to recognise consistent performance by omitting outliers from the final degree classification. Although intuitively outlying marks could be at either end of the range of performance, this does not appear to translate into practice. Rather than simply discounting marks, institutions should ensure that they are recognising consistent performance. If only the worst, outlying marks are omitted, it is possible that this would lead to grade inflation.

Of the remaining 21 responses to this question, 11 attributed differential weightings between programme years. The weighting of programme years is considered in detail in the 'Final classification rules' section of this report. A further eight responses to this question did not provide enough detail to be interpreted.

BORDERLINE PERFORMANCES AND RECOGNISING PRIOR LEARNING

This section focuses on outlining the approaches of institutions making provision for borderline performances. It also considers how attainment outside the institution is recognised (if at all).

The sector has generally adopted a transparent, rules-based approach to consider performances on the borderline of a degree classification boundary. This trend is expected to continue and likely to lead to greater consistency in decision-making. The approach has been adopted in part in response for student requests for transparency and consistency in assessing final marks. However, care should be taken to ensure that these rules should:

a. follow good practice in the design of algorithms, particularly in relation to discounting of outlier marks

b. not have the unintended effect of lowering the effective threshold for degree classifications for all borderline students

HOW INSTITUTIONS MAKE PROVISION FOR BORDERLINE PERFORMANCES

Respondents were asked how their institution made provision for borderline performances. Respondents could select from three fixed options or submit a free text response setting out their institution's approach. 112 responses were received, and these are set out in Table 9, below.

Table 9: Provision for borderline performances

Response	Number
Automatically, based on an algorithm	47
Through the discretion of an academic board	27
Borderline cases are not considered	18
Other (please specify)	20

17 of the 'other' responses received indicated that students were identified as being on the borderline by a set of rules, and then considered by an examination board or equivalent. The remaining three responses were not relevant to the question posed. The overall trend in the sector is a move away from wide-ranging discretionary powers of an examination board or equivalent to a rules-based approach, where students are dealt with consistently across the institution.

THE USE OF MULTIPLE DEGREE ALGORITHMS

In response to feedback received through the survey and engagement events, the use and employment of multiple degree algorithms was explored with institutions that had developed them. In addition to these interviews, a survey that had been undertaken through a practitioner network was used to provide additional context on this element of practice.

Contrary to perception within the sector, a second algorithm had been designed explicitly to deal with borderline candidates, rather than across the whole student population. In effect, this second algorithm is employed to consider borderline students instead of referring the student to an examination board for consideration. In total, seven institutions classed borderline students with a second algorithm, with limited discretion also applied.

The project identified three further legitimate uses of a second degree algorithm:

- The first related to institutions that had undergone a merger and were undergoing a period of standardisation. In this instance, the algorithm is restricted to the part of the university that was historically independent.

- The second of these relates to the recognition of credit achieved outside of the provider. In this instance, this is because of the relatively high proportion of students entering the university in the final year. In order to ensure students are treated equitably, the second degree algorithm is also applied to students who entered the university prior to the final year.

- The third relates to a small number of universities that retain multiple algorithms for what appear to be historic reasons. This appears to be because points of disagreement between different disciplines have not been resolved. In these instances, the final degree outcome is only reached through a single algorithm.

There appear to have been a few misconceptions within the sector about the use of multiple algorithms. This study has found no justification of the use and application of multiple algorithms across a student population, other than for the four reasons that are set out above.

FINAL DEGREE CLASSIFICATION BOUNDARIES

As calls grow for greater parity between how students are treated, it is expected that the number of institutions using an automatic algorithm to decide on borderline cases will increase. Discretion entails making academic judgements that do not have to be consistently applied to students across multiple academic boards comprised of different individuals. One institution specified that students had consistently pushed to remove scope for discretion.

Conventionally, degree classification boundaries are well defined. These are summarised in Table 10, below.

Table 10: Final degree classification boundaries

Classification	Mark
First class honours	70 and above
Second class honours, first division	60–69
Second class honours, second division	50–59
Third class honours	40–49
Fail	39 and below

The consistent consideration of student performance at the borderlines of a degree classification boundary plays an important role in recognising student achievement that might otherwise go unnoticed. However, there would be a risk to the confidence of sector stakeholders if an institution were simply to upgrade all students who fall into a borderline or classification boundary. In effect, this practice would introduce a different set of final degree classification boundaries, and undermine both conventional practice and confidence in sector standards. Such practice, if it exists, is not acceptable.

Irrespective of whether a rules-based approach is followed, or discretion is left to the exam board, institutions should ensure that decisions are made in a consistent manner, both internally within the institution and in line with stated learning outcomes.

CREDIT TRANSFER AND RECOGNITION OF CREDIT ACHIEVED OUTSIDE THE PROVIDER

The inclusion of skills and knowledge gained, either during a year or semester in industry or abroad, within the final classification of a degree presents numerous difficulties. Discussions undertaken with academic practitioners indicate that a lack of consistency in teaching and assessment methods makes modules gained from overseas institutions difficult, and sometimes impossible to include within a degree algorithm. This is reflected in the survey response: across the UK, 20 institutions award a simple 'pass' or 'fail' award as a means of recognising modules studied overseas (this was the case more so with study abroad years than years in industry).

It is possible to argue that, conceptually, there is not a great deal of difference between credit transfer and modules studied overseas. However, institutions are more forthcoming in accepting credit transfer due to greater consistency in UK assessment practice. Modules abroad may work to a different marking scale, making them unfit for purpose, which again is empirically evidenced by 12 institutions

indicating that study abroad years or years in industry do not count towards any credit for the final degree classification (that is, they are not 'mark bearing'). Of 76 definitive responses, 23 institutions (30%) stated that they would have bearing on the final degree outcome, either through a translation of marks or that they would be equivalent to a full year of study.

MODULE LEVEL RULES

This section concentrates on academic regulations at the 'micro' level. The purpose of this section is to outline sector practice on module-level rules relating to passing a module, the process for dealing with module failure, and on what terms, if any, reassessment is offered. Outlining sector practice on these areas also provides the data necessary to understand how diverse, or how uniform, practice is across the sector. In certain areas, practice was more uniform, such as the minimum pass mark required for modules that must be passed (typically at 40%). On the other hand, what students must achieve to gain credit for a module (as part of a broader set of requirements) varied considerably, with seven different requirements identified from survey submissions.

CONSISTENCY OF ALGORITHM RULES AT THE MODULAR LEVEL

Of the 103 responses received, 85 (82.5%) indicated that their institution had consistent rules at modular level. A free text box was provided so that respondents could qualify their response, or otherwise add detail to the 'Yes' or 'No' response that had been submitted. These responses are included in Table 11, below.

Table 11: Other comments about consistent rules at module level

Response	Number
Rules are consistent except where there are PSRB requirements	13
Rules are consistent with a number of unspecified limited exceptions	8
Variation in reassessment and/or pass requirement regulations	3
Variation in minimum pass mark by level of study	2

GAINING CREDIT FOR A MODULE

Practice was fairly uniform across survey respondents, as far as regulations on what students must do to gain credit for a module was concerned. Across those who gave a definitive response from the fixed choices, 32 out of 44 (72%) require an overall pass across assessed pieces of work. Six required students to pass all assessed pieces of work and nine required an overall pass mark across assessed pieces of work, with a minimum mark (below a pass mark) for each assessed piece of work. A full complement of fixed multiple-choice options and the most popular free-text responses is in Table 12.

Table 12: Unique practices

Response	Number
Variation at the level of study. At level six, all assessed pieces of work must be passed, and at level four and level five, the module requires an overall pass.	1
Practice varies across faculty/subject area.	1

THE PASS MARK OF EACH MODULE ASSIGNMENT

Respondents were asked to specify the pass mark for module assignments and exams. Once institutional marking scales are taken into account, practice appears consistent, with 61 institutions (79.2%, n=77) indicating that the overall pass mark for a module was 40% or the equivalent, such as where a grade based assessment scheme is used. Two institutions specified a pass mark of 50%, and this is because the institutions offer specialist provision accredited by a PSRB. The other responses were either not clear (three respondents) or their response was not applicable to this question (five respondents). Practice in the sector is consistent: a pass mark for a module overall is 40% or the equivalent grade.

Outside of these responses, 17 respondents referenced exceptions for programmes accredited by PSRBs, where the pass mark is generally higher to meet the requirements of the PSRB.

RIGHTS TO REASSESSMENT IN THE EVENT OF MODULE FAILURE

Respondents were given a fixed set of responses ('yes' or 'no') along with a free-text response. These responses were combined and labelled, and divided into 'yes' and 'no' categories. The responses are slightly misleading, because although 66 respondents indicated that students had an automatic right to reassessment, 29 of these specified conditions that had to be met by the student. Therefore, of the 90 responses received, 49 (54.4%) indicated that there were minimum conditions that had to be met before a student could be reassessed. A further four institutions indicated that there was no right to re-assessment but without specifying the conditions.

The design principle underpinning these responses holds that reassessment should be offered only where there is a reasonable chance that the student will succeed. So, if a student does not meet a minimum number of credits at the relevant level, or if they have not met a minimum level of achievement then they are not offered reassessment. The consequence of this is that students who are unlikely to succeed are not subject to reassessment

CAPS APPLIED TO RE-ASSESSED ASSIGNMENTS

Respondents were asked whether reassessed assignments were subject to a cap at their institution. Of the 89 responses received, 62 (70.0%) indicated that they were subject to a cap at the pass mark. A further 23 (25.8%) indicated that there was a cap in place without specifying what the cap was. These responses relate to general practice: some institutions indicated that a cap did not apply if the student had adverse, mitigating and or extenuating circumstances, and this is considered in greater detail below. General practice across the sector is to cap re-assessed assignments, and based on the responses received from institutions this cap is applied at the pass mark of the module.

THE NUMBER OF PERMITTED REASSESSMENT ATTEMPTS BEFORE A STUDENT IS REQUIRED TO REPEAT A MODULE

The majority of respondents (70, 76.9%) indicated that their institution limited reassessments to one before students were required to repeat a module. A further ten institutions indicated that their institution permitted two reassessment attempts with two respondents indicating that their institution permitted three. Given that there is limited variation within the sector, institutions may wish to consider limiting reassessments to one, with discretion limited to adverse, mitigating or extenuating circumstances.

LIMITS ON MODULE REASSESSMENT AND REPEATS

Respondents were asked if there was a limit to the number of times a module may be repeated or retaken. Of the 94 responses received, the most common response was that one reassessment or re-take was permitted. Although there was a long tail of other responses, these appear to reflect a misinterpretation of the question that was posed.

In general, institutions permit a module to be re-assessed just once. Students may repeat or retake the module, and this repeat may be reassessed once. Six institutions do not allow students to repeat modules, with a further four institutions allowing modules to be repeated only in exceptional circumstances.

As a general model, institutions might be expected to allow for one reassessment of a module, and students to repeat a module once (again, with the chance of a single reassessment). The expectation is that students would not be permitted to routinely retake assessments until they pass.

GRADE POINT AVERAGE (GPA)

An entire section of the survey explored the uptake of GPA across the sector and its perceived advantages and disadvantages, both as a standalone system of grading degrees and in tandem with traditional honours degree classification. The responses received from higher education providers indicate that the adoption of GPA has been slow and that there is little appetite for future uptake.

Past interest in GPA has been linked to more specific classification of student attainment – with students placed on a decimal scale from 0 to 4.25 based on an average of assessment grades. In turn, the score on the decimal scale could also be translated into a grade. For example, the GPA scale proposed by the HEA is a fifteen point scale ranging from 0.0 to 4.25. However, where GPA has been adopted, it has not delivered the benefits originally envisaged. Problems with GPA include a lack of awareness among students and employers, meaning it is typically used in parallel to conventional classification. Furthermore, there are multiple ways of designing and implementing GPA, which further undermines the comparability of scores.

The HEA launched a pilot of GPA in 2013–14 across 21 higher education institutions. This was the culmination of a decade of discussion regarding how student achievement should be represented. In addition, the Higher Education Achievement Report was established following a set of recommendations from the Measuring and Recording Student Achievement Steering Group. Work from this Steering Group and the Burgess Implementation Steering Group led to the HEA pilot.[10]

The survey responses, of which there are 106, indicate that there is limited appetite in the sector to use GPA in tandem with honours degree classification. 77 (72.6%) of respondents indicated that their institution was not planning to introduce the GPA. Of the 29 institutions that had plans to introduce the GPA, seven (6.6%) had introduced a GPA, with a further five (4.7%) piloting a scheme. One institution indicated that it had made good process towards the introduction of the GPA without setting out a time frame for introduction. A further 14 (13.2%) institutions indicated that they had had preliminary discussions only about the introduction of the GPA.

Respondents who indicated that their institution had plans to introduce the GPA were asked further questions about whether they were planning to apply equal weightings to modules, whether they were planning to adopt the single GPA scale, and what they perceived to be the advantages and disadvantages of the GPA.

Responses received were mixed. 10 out of 19 respondents indicated that they planned to introduce an equal weighting to all modules, whereas nine indicated that they planned to weight modules differently or exclude some modules altogether. 12 respondents out of 19 indicated that they planned to adopt the GPA scale published

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[10] https://www.heacademy.ac.uk/system/files/resources/GPA-report-2013-14.pdf.

by the HEA, while the remaining respondents indicated that they planned to adopt a different scale or were already using a different scale.

The key message from this section is that even where the GPA is being introduced, it is unlikely to deliver some of the envisaged benefits. The absence of a single, sector-agreed GPA scale means that GPA scores are unlikely to be comparable without conversion.

ADVERSE, MITIGATING AND, EXTENUATING CIRCUMSTANCES

This section covers the questions asked to the survey's respondents on how rules on adverse, mitigating and, extenuating circumstances influenced the degree algorithm, and what their approach is. This section refers to such circumstances as 'extraordinary circumstances.' Institutions consider extraordinary circumstances through two approaches: a discretionary approach determined by the examination board or equivalent; or a rules-based approach. In practice, the majority of institutions fall between these two positions.

This section was covered to outline the diverse range of practice in the sector relating to extraordinary circumstances, as they apply to the final degree algorithm. The key finding is that institutions are rightly reluctant to quantify the specific impact of individual circumstances on a student's ability to undertake formal assessment, because such a determination requires both academic judgement and a judgement of the circumstances of the individual concerned.

HOW ADVERSE, MITIGATING AND EXTENUATING CIRCUMSTANCES ARE CONSIDERED

Based on the scoping work undertaken, institutions appeared to make decisions on extraordinary circumstances in three ways. The first is to follow a rules-based approach. The second is on a discretionary basis, with an examination board acting as the decision-maker. The third approach is a combination of the first two approaches, where a case is considered against a defined set or rules with exceptional cases referred to an examination board or equivalent. Respondents were asked to specify which approach they took, and 107 responses were received. The results are summarised in Table 13, below.

Table 13: how adverse, mitigating and extenuating circumstances are considered

Response	Number
Decisions are made according to a defined set of rules	52
Decisions are made on a discretionary basis	19

A further 36 free text responses were received, which indicated that a fixed set of rules were used with scope for discretion to deal with cases where there is no precedent or where cases were not covered by the rules.

THE EXTENT TO WHICH RULES AROUND EXTRAORDINARY CIRCUMSTANCES INFLUENCE THE FINAL DEGREE ALGORITHM

Respondents were asked about the extent to which rules around extraordinary circumstances could influence the final degree algorithm. Respondents could choose one or more options or submit a free text response or both. 108 institutions responded to the survey. The fixed text options are presented in Table 14, below.

Table 14: the impact of rules around extraordinary circumstances

Response	Number
Allow students to receive an extension or deferral	92
Allow students to re-take or re-submit assessed pieces of work or works	79
Used to adjust the final degree award	36
Used to adjust marks or grades for an individual module	14
Used to adjust marks or grades for an individual piece of assessment	12
Used to adjust marks or grades for a year of study	6

Only two of these responses, adjustment to the final degree award or adjustment to marks or grades for a year of study would be considered to fall inside the degree algorithm. The other responses would likely impact the final degree classification but would not materially affect the process, all other items being equal.

In addition to the fixed responses, 33 free text responses were received. Of these responses, 22 were qualifying comments intended to support the fixed responses submitted. The remaining 11 comments are set out in Table 15, below.

Table 15: the impact of rules around extraordinary circumstances (free text)

Response	Number
Progression between levels of study can be adjusted	3
Rules do not affect the final award algorithm	3
Exclusion of certain assessment components	2
Variation of weighting and/or assessment method	1
Only used in borderline cases	1
Subject to PSRB requirements	1

As should be clear from the overwhelming majority of responses, institutions typically use extraordinary circumstances to receive an extension or deferral or to allow students to re-take or re-submit assessed assignments.

The qualifying comments received indicated the circumstances in which rules or discretion might permit the adjustments. Where these qualifying comments were submitted, they indicated that the circumstances were exceptional, and not just extraordinary.

At the time of the next review, institutions should consider how frequently some of the rules are being used. This information could usefully be included in an explanation of what rules are in place and how frequently they are employed so there is transparency over not just the extent over which examination boards have discretion but how frequently such powers are used.

AEGROTAT AWARDS

An aegrotat award is an award conferred on a student in exceptional circumstances. It is, in effect, an institutional statement that a student would have met the standard expected of the award, but were not able to do so, usually for serious medical reasons or, in extreme cases, due to the death of the student. The award is unclassified, and students waive the right to be reassessed if they accept one.

The frequency with which aegrotat awards are made

Although one response suggested that aegrotat awards were incompatible with a credit system, most respondents (93, 87.7%) indicated that their institution had regulations in place that allow them to confer aegrotat awards.

75 respondents provided detail about the circumstances in which an aegrotat award is made. Across 56 (74.7%) institutions, regulations allow awards to be made in exceptional circumstances, not just those relating to health conditions. However, 16 (21.3%) institutions confer them only on matters relating to student health, and two institutions confer the award posthumously.

The number of aegrotat awards conferred is relatively low. Of the institutions that provided data, 53 (73.6%) had conferred at least one award in the last five years. On average, three awards were made. 19 institutions have not conferred any awards in the last five years. These awards are made rarely in the most exceptional of circumstances and have little impact at system level.

CONCLUSION

This project was undertaken because of concerns that design decisions on degree algorithms were being systematically used to inflate the proportion of first or upper second-class degrees awarded by an institution. Although there is limited evidence to suggest that this is the case, the sector collectively – and institutions individually – should do more to explain practice and decisions. Furthermore, it remains essential that the processes by which institutions design their degree algorithms continue to be led by strong and accountable academic governance.

The major trend has been a shift to a more transparent rules-based approach. This approach means that in most institutions, examination boards have less discretion when it comes to final award decisions, but still exercise influence by considering exceptions or cases that are not covered by the institution's rules. This is a welcome development that should improve the transparency and consistency of approaches. Equally it is also important that these rules maintain the conventions around the classification of degrees and wider confidence in robust academic standards.

The trend toward rules-based approaches is in part driven by the need for improved transparency and accountability to students about how degrees are classified, particularly in relation to borderline cases. The use of a rules-based approach for students who meet a set of criteria to be considered for a higher award limits the discretion of the discretionary powers of examination boards. Instead it establishes a clear, institution-wide agreement over what constitutes higher performance. As with the other changes to practice, this is a clear opportunity to ensure that all students are treated fairly.

In this context, the report focuses on areas that may undermine confidence in practice, particularly around borderline cases given the impact on individual students. Where specific rules are used for borderline cases these should not be used to effectively lower the threshold for classifications. Furthermore, where institutions discount lowest grades, particularly in the initial classification and for borderline cases, upper marks should also be discounted.

Where one or more of these components are in use by an institution, the institution should consider reviewing its regulations. However, this report also stresses that there are legitimate variations in practices around the sector. The different approaches to the weighting of programme years is a legitimate debate and has a bearing on the relative impact of other components of the algorithm. Furthermore, certain types of provision may have justifiable reasons for using exceptional practices, such as in the case of the creative and performing arts.

This project has not systematically considered interactions between individual components of a degree algorithm to assess their likely impact on classification outcomes. The practices that have been identified as problematic are binary in

nature. Either they are in academic regulations or they are not, and are problematic on points of principle rather than as gradations of practice. While it is possible that the interactions between other components of algorithms can and do lead to grade inflation, there are a range of other practices and factors that will also affect these outcomes.

Furthermore, further grading of individual components or consideration of how they interact to determine outcomes is difficult because of the way definitions are used across the sector. In some instances, institutions are describing different, distinct components of the algorithm in the same way, particularly in relation to compensation and condonement. In others, institutions are applying the same components but defining them in different ways. The consequence of this is that comparison between 'models' or combinations of components is difficult. This report is necessary step but will not resolve these differences immediately.

RECOMMENDATIONS

The recommendations set out in this section are consistent with the findings and conclusion of this report. Individual institutions with degree awarding powers are autonomous bodies, and should continue to define their own academic regulations. The practice of institutions should be transparent, and led by robust academic governance and referenced against UK-wide approaches to quality and standards. The following recommendations make suggestions to support institutional decision-making to make the design of degree algorithms more transparent.

1.   Guidance on design principles should be included as part of the Quality Code.

Where degree algorithms are effectively designed, they mirror the ethos, values, and teaching models and practice of the education provider. The revision of the Quality Code presents an opportunity to include design principles for degree algorithms, and an expectation of greater transparency of arrangements for protecting academic standards, including degree algorithms. This guidance would include aspects of practice that have been identified as part of this report.

In broad terms, degree algorithms should:

- be administered through a clear and robust process of academic governance, especially when changes are considered

- be transparent with the rationale and structure of algorithms clearly communicated to students, staff, and external stakeholders

- demonstrably reflect the mission and values of the degree awarding power, as well as the subject provision that is offered, without lowering standards

2. *Institutions should publish explanations for the design of their degree algorithms and update these explanations when adjustments are made.*

This project has been driven by concerns that institutions have adapted their degree algorithms solely to improve the proportion of 'good' honours degrees that are awarded to their students and improve standings in league tables. The findings suggest that concerns about the motivation for changes have been overstated. Nevertheless, all who have participated in this project were motivated by a desire to improve transparency around how algorithms were being designed and the motivations behind these decisions.

To address this, institutions should ensure that the algorithms are transparent and based on clear principles that align with the educational mission and values of the institution and pedagogical practice, without lowering standards. Furthermore, institutions should also be able to justify changes that are made. Improving transparency of decisions will aid confidence in the approach adopted by institutions, the accountability for decisions and design of algorithms, and deter poor practice that might undermine confidence in standards. This report aims to provide a point of reference for this process.

3. *External referencing of algorithm design is legitimate, but should be motivated by robust pedagogical practice in the interests of students.*

This report and the research that underpins it will allow practitioners to reflect on their institution's practice and consider, through external referencing, whether practice aligns to sector norms. The report includes links to other resources that institutions might find helpful, and the inclusion of guidance in the Quality Code will support institutions in the future.

Earlier studies have remarked on the ways in which institutions reference and consider practice elsewhere. This is unsurprising, given the way in which the sector has developed and grown over the past hundred years. Institutions are expected to continue to reference practice in the higher education sector; but as autonomous bodies, design decisions should be motivated by the pedagogical practice of the institution.

4. *Classification boundaries are clearly defined and institutions should not engage in activity that undermines this existing convention.*

The consideration of student classifications at the boundary of a classification plays an important role in ensuring that achievement is properly recognised. However, there is a potential risk that confidence in standards will be undermined if the outcome of rules-based or discretionary approaches have the effect of lowering a classification boundary by automatically awarding the higher classification to all students who fall within a specified margin.

5. *Institutions should review their regulations if they assess a student using more than one algorithm or only discount lowest grades.*

An individual student's attainment should be classified using only one award algorithm. This does not preclude the use of more than one algorithm within the institution although the sector trend is toward harmonisation of practice within institutions for reasons of transparency and consistency. Furthermore, rather than simply discounting marks, institutions should ensure that they are recognising consistent performance.

6. *Degree algorithms should be transparent and accessible.*

Institutions should review how their algorithm is presented to students, as well as staff and external stakeholders. Higher education providers have made significant progress in giving students clear and accurate information, including fair and transparent terms and conditions of which academic regulations form a part. The simplification and improved presentation of academic regulations offers further opportunities for providers to provide more information to students. A small number of providers have calculators which allow students to check their progress towards a final degree classification. Others have re-written their regulations to simplify them. Clarity over learning outcomes and assessment can support students through their studies.

7. *Students should be involved in reviews of degree algorithms.*

It is essential that students have confidence in the academic arrangements of the institution and it is to be expected that students, as members of the wider academic community, are engaged in any review of academic regulations. The survey of degree awarding powers found that most, but not all, of the providers surveyed include students in their review of academic regulations. These conversations should actively engage students with a wide range of student characteristics to identify inappropriate barriers to student success.

NEXT STEPS AND FURTHER WORK

This report aims to help the UK higher education sector improve the transparency and accountability of practice around degree algorithms. UUK and GuildHE will continue to work with members, the QAA and the Academic Registrar's Council to raise sector awareness of the report's findings and embed its recommendations into institutional decision making. We will also work with the UK Standing Committee for Quality Assessment to consider how to embed the findings and recommendations of this report into the work of the sector

This report covers one aspect of the way that student attainment is assessed and classified. It has been motivated by the need to ensure integrity and consistency in a key area of practice in the context of a diversifying higher education sector. It has also

been motivated by concern about the implications and impact of recent and longer-term increases in the proportion of students receiving a good honours degree. This trend has raised concerns that the value of the degree classification system as a measure of classifying and differentiating attainment could be undermined.

In the 2015–16 academic year, 22.8% of all graduates from UK universities received a first-class honours degree. Students at universities are assessed against the learning outcomes of the course and the criteria set out in the credit and qualification frameworks. In this respect, it is technically possible for all students to receive a first-class degree. This raises a series of questions for the sector, including:

- To what extent are sector-wide trends driven by 'improvements' in student attainment as well as 'inflationary' assessment and classification practices?

- Are there tensions between the sector's criteria based assessment and norm referenced perspectives of student classification?

- How should the management of academic standards respond to and reflect legitimate improvements in student attainment over time?

- How should the sector balance protection of autonomy and diversity against the management of collective risks and comparability?

The honours degree classification remains a powerful and internationally recognised measure of student achievement. It is used by graduates to demonstrate their academic achievement and by employers to identify the best candidates. In this context, work is required to maintain confidence in sector standards while protecting institutional autonomy and diversity. UUK and GuildHE will work with the UK Standing Committee for Quality Assessment to address this multifaceted challenge.

GLOSSARY

Accreditation of prior learning is the process which considers previously certified learning in offering a learner advanced standing on a programme of study that leads to a qualification.

Aggregation and averaging of marks into an overall average can blur differences between individuals. For example, an individual who consistently performs at a moderate level may get the same final mark as one who performed exceptionally in some modules and less well in others. The award of honours might mitigate this problem to a small extent.

Benchmark is a target figure, or standard, against which to measure performance. The target figure or standard is based upon an analysis of an assembly of appropriate comparable data.

Compensation is another way in which institutions mitigate poor performance in a module or modules. Poor performance in one or more modules is offset by considering the score against satisfactory performance in other modules.

Condonement reflects institutional acceptance that the failure of a module does not disqualify the student from eligibility to the target award.

Credit transfer is the formal process by which credit awarded in one context is recognised and accepted as satisfying the requirements of an award in another context.

Degree algorithm refers to the process or set of rules that institutions follow to determine the final classification of a course or programme.

Discounting is the practice of not counting module marks towards a final degree classification. This practice varied within institutions, as well as between them.

The **Framework for Higher Education Qualification** describes the achievement represented by higher education qualifications in England, Wales and Northern Ireland. The framework applies to degrees, diplomas, certificates and other academic awards.

Recognition of prior learning is the assessment of previous learning that has occurred in any of a range of contexts including school, college and university, and/or through life and work experience. Once recognised through this process, prior learning can be used to gain credit or exemption for qualifications and/or personal and career development. This term is used mainly in relation to the Scottish higher

education system, with the term accreditation of prior learning normally being used in the rest of the UK.[11]

Resit or reassessment is the process of repeating a component of modular credit, such as a written exam or practical demonstration.

Retake or repeat has a broader meaning, referring to repeating an entire module (all components), an entire year or a semester. Alternatively, it is a second opportunity to study a module, semester, or year with new assessment and re-assessment opportunities.

Scottish Credit and Qualifications Framework brings mainstream Scottish qualifications into a single, unifying credit-based qualifications framework, encompassing all levels and all types of learning.

Trailing credits are core, compulsory credits which have not been passed at first attempt or reassessment, and are carried over and repeated in the next academic year for completion.

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[11] www.qaa.ac.uk/about-us/glossary?Category=R#185 http://www.qaa.ac.uk/about-us/glossary?Category=R#185

FURTHER READING

Bachan, R. (2015) *Grade inflation in UK higher education*. Studies in Higher Education. ISSN 0307-5079.

Curthoys, M. (2007) Bicentenary of the Oxford Class Lists. *Oxford Magazine* no. 269, pp. 8–10.

Dalziel, J. (1998) 'Using Marks to Assess Student Performance, some problems and alternatives', *Assessment & Evaluation in Higher Education* Vol. 23, pp. 351–366.

Higher Education Academy (2015). *Grade point average: Report of the GPA pilot project 2013-14*

HEFCE (2015). *A review of external examining arrangements across the UK: Report to the UK higher education funding bodies by the Higher Education Academy.*

Rust, C (2011). 'The Unscholarly Use of Numbers in Our Assessment Practices: What Will Make Us Change?' *International Journal for the Scholarship of Teaching and Learning*. Vol. 5: No. 1, Article 4.

UK Credit Forum (2010) *Making Sense of Credit and Qualification Frameworks in the United Kingdom*. Edited by Paul H Bridges and Mark Flinn. Published by the University of Derby.

UK Credit Forum (2017) *Aspects of credit practice in English and Welsh universities*. Edited by Mark Atlay and Wayne Turnbull. Accessible through: www.seec.org.uk/about-us/ukcf.

Universities UK (2007). *Beyond the honours degree classification: the Burgess Group final report*.

Universities UK (2012). *Bringing it all together: introducing the HEAR*.

Yorke, M., et al. (2008). 'Enigmatic variations: Honours degree assessment regulations in the UK', *Higher Education Quarterly* 62 (3), pp. 157–180.

ACKNOWLEDGEMENTS

LIST OF DEGREE AWARDING POWERS RESPONDING TO THE SECTOR SURVEY

Abertay University

Aberystwyth University

AECC University College

Arts University Bournemouth

Aston University

Bath Spa University

Birkbeck, University of London

Birmingham City University

Bishop Grosseteste University

Bournemouth University

Brunel University London

Buckinghamshire New University

Canterbury Christ Church University

Cardiff Metropolitan University

Cardiff University

Coventry University

De Montfort University

Durham University

Edge Hill University

Edinburgh Napier University

Falmouth University

Glasgow Caledonian University

Goldsmiths, University of London

Guildhall School of Music & Drama

Harper Adams University

Heriot-Watt University

Keele University

King's College London

Kingston University London

Leeds Arts University

Leeds Beckett University

Liverpool Hope University

Liverpool John Moores University

London South Bank University

Loughborough University

Manchester Metropolitan University

Newcastle University

Newman University, Birmingham

Northumbria University

Norwich University of the Arts

Nottingham Trent University

Plymouth University

Prifysgol Bangor University

Queen Mary University of London

Queen's University Belfast

Robert Gordon University

Rose Bruford College

Royal Academy of Music

Royal Agricultural University

Royal College of Music

Royal Conservatoire of Scotland

Royal Veterinary College

Sheffield Hallam University

SOAS, University of London

Southampton Solent University

Staffordshire University

Swansea University

Teesside University

The London School of Economics and Political Science

The Open University

The University of Nottingham

University College London

University College of Osteopathy

University for the Creative Arts

University of Aberdeen

University of Bath

University of Bedfordshire

University of Birmingham

University of Bolton

University of Brighton

University of Bristol

University of Cambridge

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University of Gloucestershire

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University of Leeds

University of Leicester

University of Lincoln

University of Liverpool

University of Northampton

University of Oxford

University of Portsmouth

University of Reading

University of Roehampton

University of Salford

University of Southampton

University of St Andrews

University of St Mark & St John

University of Stirling

University of Strathclyde

University of Suffolk

University of Sunderland

University of Surrey

University of the Arts London

University of the Highlands and the Islands

University of the West of England, Bristol

University of the West of Scotland

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University of Wales Trinity Saint David

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University of Winchester

University of Worcester

University of York

Wrexham Glyndwr University

York St John University

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