

Grade point average: Report of the GPA pilot project 2013-14



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Foreword



This report is published as the result of a range of investigations and debates involving many universities and colleges and a series of meetings, presentations, discussions and consultations. Interest in a grade point average (GPA) system was originally initiated by a group of interested universities, progressing to the systematic investigation reported here. It asks the question: Can a GPA system enhance the reporting of student achievement in the UK?

This endeavour has built on the work of my group, which resulted in the Universities UK report *Beyond the Honours Degree Classification* published in 2007. That report concluded that the UK honours degree is a robust and highly-valued qualification but the honours degree classification system (HDC) is no longer fit for purpose. The proposals in that document for a Higher Education Achievement Report (HEAR) have been widely adopted but the need for a simple and straightforward summative indicator of a student's overall achievement remains. Students place great store by it and it makes an important contribution to employer decisions and entry to further study and training.

The need for a more granular summative indicator is vital. The latest Higher Education Statistics Agency (HESA) figures indicate that 70% of honours degree awards now fall into the upper second or first class category. GPA offers an important opportunity to tackle this situation and provide students with a more internationally recognisable measure.

Our recommendations have been carefully constructed to build upon the evidence gathered from the sector regarding the appetite and capacity for a change in award systems. In particular, we are recommending that a process of 'dual running' of GPA and HDC takes place in the first instance. This will allow institutions to adopt GPA within timescales that suit their institutional context while ensuring that a national system is retained. Dual running will also allow time for extensive communication about GPA with all stakeholders and enable evidence to be collected to refine its implementation. I am particularly pleased that we have established an agreed GPA scale for UK higher education that will improve transparency in award calculations and tackle differences in award outcomes between the quantitative and qualitative subjects.

I would like to extend my thanks to the institutions that participated in the pilot and members of the Advisory Group. Finally, I would like to thank the members of staff and associates of the Higher Education Academy (HEA) who managed this project, facilitated the engagement and meetings of participating providers and drafted this report: Professor Sue Bloxham, Professor Graham Curtis, Professor Philippa Levy, Dr Erica Morris, and Dr Geoff Stoakes.

Professor Sir Robert Burgess
Chair of the HEA's national GPA Advisory Group

Executive summary

1. This report provides information and advice to the UK higher education sector on the potential adoption of a national grade point average (GPA) system to represent the cumulative and summative achievement of students. The GPA programme of work developed from the initiative of a group of interested universities.
2. The GPA debate was prompted by the perceived limitations of the honours degree classification (HDC) system, in particular, insufficient differentiation between student performance, a lack of recognition outside the UK, and limited transparency in how the HDC is calculated by different higher education providers. A GPA system was considered worthy of further investigation because of its potential capacity to increase granularity of awards, transparency in award calculations, international recognition and student engagement in their programmes.
3. The Higher Education Academy (HEA) facilitated a pilot study in which 21 diverse providers performed a retrospective data modelling exercise on 2012-13 student achievement outcomes using a common GPA scale. A sample of these providers carried out further modelling using a number of amended scales in order to determine one that could be recommended to the sector. The proposed scale aligns with UK marking patterns and will be competitive in an international context. Pilot providers also reported on the acceptability and implementation of a GPA system taking into account their institutional context and mission.
4. Appropriate grade descriptors, staff development and good quality assurance were considered important to encourage staff to mark across the scale and use GPA grade descriptors. There was no appetite among the pilot providers for using alternative scales for 'quantitative' and 'qualitative' subjects as a means of addressing differences in marking cultures. The evidence indicates that a GPA system does not foster 'grade inflation' any more than other systems of representing summative achievement, including HDC.
5. The importance to stakeholders of a nationally-agreed, common scale is a key finding of the pilot and is considered crucial for the acceptance and success of GPA in the UK. Consultation with students provides a mixed picture of views both in favour of GPA and concerns regarding the operation, implementation and extent of use in the sector. There are early indications that large employers would welcome the transparency of GPA and availability of a cumulative measure of achievement for pre-graduation recruitment activities. Professional, statutory and regulatory bodies would welcome more consultation and input prior to implementation. The pilot providers considered that the development of widespread stakeholder understanding and commitment would require clear communication to be sustained over a number of years.

6. There was a consensus among pilot providers that change to institutional regulations may be required in implementing GPA. There was some difference in views regarding the extent of changes envisaged and these differences partially depend on the extent to which providers' existing systems are more or less ready to implement GPA. Likewise, some operational impact is expected on aspects such as examination boards, student record systems, and validated and collaborative awards. The diversity of institutional regulations indicates that degree awarding bodies will need to determine their own arrangements for a range of regulatory and policy matters regarding the operation of GPA. Providers had a range of views on whether 'dual running' of GPA alongside HDC would need less change to regulations and operations in comparison with moving immediately to GPA.
7. UK degree awarding bodies are autonomous institutions with the power to decide whether or not to adopt a GPA system and the nature of that system. The report concludes from the evidence that introducing a GPA system would have benefits to UK higher education in terms of greater granularity in awards, international recognition, and the potential to encourage student motivation and engagement. A period of 'dual running' of GPA alongside HDC has a range of advantages in comparison with an immediate change to GPA as the sole system. In the longer term, a universal GPA system with a common scale has the capacity to provide greater transparency and comparability regarding student awards across subjects, programmes and providers than is currently offered by the HDC system.
8. The next steps in taking forward the GPA work will require widespread dissemination and consultation across the sector and with interested parties such as employers and professional, statutory and regulatory bodies, and the development of guidance for key stakeholder groups.

Recommendations

Recommendation one: a single GPA scale for UK higher education should be adopted by all UK providers.

Table1: The GPA scale for UK higher education		
Grade	Mark	Grade Point
A+	≥75	4.25
A	71-74	4.0
A-	67-70	3.75
B+	64-66	3.50
B	61-63	3.25
B-	57-60	3.0
C+	54-56	2.75
C	50-53	2.50
C-	48-49	2.25
D+	43-47	2.0
D	40-42	1.50
D-	38-39	1.0
F+	35-37	0.75
F	30-34	0.50
F-	≤29	0.0

Recommendation two: ‘dual running’, during which both GPA and HDC outcomes will be reported, should be introduced in the first instance. This should be followed by a national review of the adoption of GPA after a period of no more than five years. Institutions may opt to switch to GPA alone when and if they judge it appropriate.

Recommendation three: degree awarding bodies will need to exercise institutional discretion on a range of regulatory and policy matters associated with their GPA award system.



Part I: Introduction

- I.1 The purpose of this report is to provide information and advice to the sector on the potential adoption of a national grade point average (GPA) system to represent the summative achievement of UK higher education students, drawing on the outcomes of a pilot study involving 21 higher education providers across the UK. The report proposes a potential way forward drawing on the purposes of, and the evidence from, the pilot.
- I.2 The Higher Education Academy (HEA) facilitated the pilot to test the use of various GPA scales and explore associated implementation issues. In the pilot, each participating provider performed a retrospective data modelling exercise on 2012-13 student achievement outcomes using an agreed GPA scale. A sample of these providers carried out further modelling using a number of amended scales. Pilot providers reported on the acceptability and implementation of a GPA system taking into account their institutional context and mission.
- I.3 The GPA programme of work commenced following the initiative of a group of interested universities (GIU). These providers began an exploration of a common GPA system as a potential alternative to the honours degree classification (HDC). The intention of the GIU was to offer students a measure of achievement at the end of their undergraduate career which, compared with HDC, would be better able to reflect different levels of attainment; would be more transparent; globally understood; and reflective of and compatible with the culture of marking in UK higher education. The GIU initiative prompted the wider debate about GPA, which led to the pilot project reported here. The GIU undertook some preliminary investigations and modelling of existing student results, and raised many of the questions that have been explored in the pilot work.
- I.4 The Higher Education Academy (HEA) facilitated the pilot to test the use of various GPA scales and explore associated implementation issues. In the pilot, each participating provider performed a retrospective data modelling exercise on 2012-13 student achievement outcomes using an agreed GPA scale. A sample of these providers carried out further modelling using a number of amended scales. Pilot providers reported on the acceptability and implementation of a GPA system taking into account their institutional context and mission.
- I.5 A further group of HEIs declared an interest in the GPA development and has been kept informed of the progress of the pilot work. The HEA has supported a wider programme of work, which has involved working with key groups, including employers and professional organisations relevant to higher education, to stimulate an informed debate about the potential use of a GPA system in the UK.

What is the honours degree classification (HDC)?

- I.6 The HDC system provides a summative judgement of a student's performance on an undergraduate honours degree programme. It is well established across all UK higher education providers, which use the same classification nomenclature for honours degrees with some exceptions, such as medical degrees which are not classified. There is a maximum of five points on the scale: First, Upper Second (2.i), Lower Second (2.ii), Third and Fail.
- I.7 The calculation of a student's classification is determined by a provider's algorithm for combining the marks from all the contributory modules or elements of their programme. Algorithms typically weight higher-level modules more heavily and may discount some courses, for example, work in the first year or level of study. Calculation of HDC typically includes a process of 'profiling' by examination boards and providers exercise discretion both in the rules that apply to profiling and the degree of discretionary judgment available to examination boards.
- I.8 An important aspect of the wider context of the work reported here is the autonomy of UK providers holding degree awarding powers. This includes institutional autonomy in both award regulations (in particular, the algorithms used to calculate a student's HDC) and in the award decisions of examination boards and senior university committees, such as senates or academic boards.

What is grade point average (GPA)?

- I.9 GPA is a measure of student achievement used both during and on completion of a programme of study. The pilot work reported here has been based on a GPA scale similar to the core North American model of GPA whereby letter grades are given to assessments, with implied descriptors, such as A = excellent, B = good/above average, and so on. Typically with GPA, student work is graded A to D, or F (a fail), and then converted to a grade point (where A = 4.00 and D = 1.00). In North America, a GPA is then calculated by averaging the grade points for every course from all years of study (i.e. a 'straight average'). A GPA system gives students access on a continuous basis to a cumulative average as well as their receiving an end of programme GPA score.
- I.10 There are different GPA systems in use across and within countries, with different scales (Soh 2011; Holland 2012). The final grade can be calculated in different ways where this is desired by, for example, excluding first year grades or weighting final year grades. However, part of GPA's 'appeal' is its transparency across students, programmes and providers, and we have found no evidence of providers or systems internationally using complex calculations as opposed to a 'straight average'.
- I.11 For the purposes of this text, we refer to the GPA 'system'. This system has two important elements. Firstly, the scale that is employed and, secondly, the 'methodology' that is used to create the GPA score for an individual student. The 'methodology' includes all the considerations, with the exception of the scale, which impact on the GPA calculation (for example, any discounting, weighting or exit velocity arrangements, treatment of resit grades, and compensation or condonement rules).

The purpose of the GPA programme of work

I.12 The purpose of the programme has been to investigate and debate whether a GPA system is in the best interests of students as a system that can:

- be adopted nationally while recognising the autonomy of UK higher education providers in determining their award regulations;
- provide greater granularity in reporting achievement;
- encourage student engagement and effort throughout a programme;
- offer increased transparency in relation to how the award is calculated;
- make students' achievements more comparable (for example, between qualitative and quantitative subjects);
- give students, employers and other stakeholders a simple, comprehensible, record of achievement, which is globally recognised.

Organisation of this report

I.13 This report comprises five parts including this introduction (part one). Part two provides a brief history of the interest in GPA in the UK as the background to the pilot, describes the project methodology, and sets out the findings in relation to a recommended common GPA scale. Parts three and four present information regarding the potential benefits and challenges of utilising a GPA system, and include both wider contextual information and feedback from the pilot providers. These parts provide the evidence to support the conclusions of the pilot and culminate in part five, which provides recommendations in relation to the introduction of GPA in UK higher education. There are also three appendices, including a glossary of technical terms and acronyms (Appendix A).



Part 2: Pilot project

Background and rationale

- 2.1 Over the last decade, there has been extensive consideration of the assessment and representation of student achievement in UK higher education. In 2004 the Measuring and Recording Student Achievement Scoping Group established the case for fundamentally reviewing the current system for classifying UK honours degrees, which it considered was no longer “fit for purpose” (Universities UK 2004, p. 4). A Measuring and Recording Student Achievement Steering Group was established to consider, develop and consult on practical proposals for the implementation of the Scoping Group’s recommendations. In its final report (Universities UK 2007, the Burgess Report) the group considered that “signing-off a person’s education with a simple numerical indicator is at odds with lifelong learning” (p. 7). It concluded that a wider representation of a student’s achievements was preferable to the degree classification and proposed an approach which has subsequently been developed as the Higher Education Achievement Report (HEAR).¹ In the period since 2007, considerable work has taken place to pilot, refine and implement the HEAR.¹
- 2.2 However, the Steering Group report observed that most other countries seem to accept the need for a simple and straightforward summative indicator of a student’s overall achievements, noting that “the GPA should receive more detailed consideration alongside other options should a summative judgement of students’ performance remain” (Universities UK 2007, para. 48). The Group concluded that establishing an alternative to the HDC would be fraught with difficulties; thus, alternatives should be explored in detail before any major change was implemented. It found that there was no consensus for a particular approach, but generally those consulted preferred changes within the current HDC system rather than considering a new system. The Steering Group recommended that detailed exploration, development and testing of any potential replacement system should be carried out in parallel with the existing HDC system.
- 2.3 The work reported here has built on and extended the research undertaken for the Burgess Implementation Steering Group (Universities UK 2007; Holland 2012), the subsequent investigations of the GIU (see 1.3 above), and discussion at a roundtable event in December 2012 attended by then Minister of State for Universities and Science the Rt Hon David Willetts, senior higher education staff and representatives of relevant organisations. Following the roundtable event, the HEA offered to facilitate a national discussion on the concept of introducing a GPA system into English higher education and the Minister accepted this offer. The HEA then undertook further scoping work, which led to the establishment of the pilot reported here, to examine the potential use of a UK-wide GPA system.

¹ HEAR website: www.hear.ac.uk

- 2.4 The HEA's programme of work has included consultation about the GPA with a range of stakeholders, including students (the HEA's student advisory forum, NUS, and via the pilot providers), higher education providers, sector agencies and organisations (e.g. BIS, QAA), employers (e.g. AGR), and professional groups in higher education (e.g. academic registrars).
- 2.5 The programme of work has focused its attention on all degrees that are classified within an honours structure. It has not considered sub-degree level or postgraduate awards although this does not preclude the use of GPA in the assessment of awards at different levels in the Framework for Higher Education Qualifications in England, Wales and Northern Ireland² or the Framework for Qualifications of Higher Education Institutions in Scotland.

Pilot project methodology

- 2.6 Expressions of interest in the pilot were invited from higher education providers in order to obtain a diversity of mission, size and student body. Further criteria for selection included capacity to conduct the pilot activities in the required period and a strong commitment to engage students as partners throughout the process.
- 2.7 Twenty-one higher education providers from across the UK (including further education colleges and private providers) were recruited to the pilot (see Appendix C). Each participating provider was asked to carry out a retrospective data modelling exercise on 2012-13 student achievement outcomes using an agreed GPA scale with a representative group carrying out further modelling with modified scales. The results of this modelling, and feedback on a range of implementation issues and stakeholder consultation, were gathered through an institutional reporting process.³
- 2.8 Each provider was asked to establish a working group with a range of representatives including a student or student representative. Members of each group attended a series of five facilitation meetings held by the HEA. Throughout the pilot work, the HEA facilitated support and knowledge exchange among the providers. There also was engagement with a larger group of higher education providers interested in the GPA and whose representatives participated in parts of each facilitation meeting. The HEA is extending this programme activity of 2013-14 through 2014-15 in order to provide ongoing support for UK-wide development and debate regarding GPA implementation.

² www.qaa.ac.uk/publications/information-and-guidance/publication?PubID=2843

³ Nineteen out of 21 institutions returned reports including providers from across the UK nations: these were from seven Russell Group universities, two from GuildHE, four from University Alliance, one Million+ and five non-affiliated institutions, three of which were further education institutions.

- 2.9 Guidelines for the pilot project were produced for higher education providers. These set out the expectations in relation to GPA testing and associated data modelling. The guidelines included a pilot GPA scale, which was based on the scale used by the GIU.⁴ In order for the pilot to yield information suitable for assessing the viability of a GPA scale, it was important that there was consistency in the way GPA was tested in pilot providers.
- 2.10 Providers were asked to test the pilot GPA scale across the entire undergraduate offer by carrying out retrospective data modelling using data for the graduating 2012-13 cohort of students. Three approaches were provided in the guidelines for providers:⁵
- 'mirror approach', in which the provider determines the HDC in its standard way. A GPA is then worked out from the individual module grade points using the 'exit velocity' weighting – the approach to inclusion (or otherwise) of year one modules, together with any other factors as in the provider's own current honours degree classification algorithm. Providers were asked to adopt this approach as the 'base case';
 - 'straight average' approach, in which the provider determines the HDC in its standard way. A GPA is obtained by calculating the arithmetic mean (credit weighted) of all grade points of all modules undertaken by the student as part of their programme (i.e. no exit velocity weighting and year one modules are part of the calculation);
 - 'transfer' approach, in which after a grade point has been assigned to each module a GPA is calculated mirroring the provider's own current degree classification algorithm. The honours degree awarded to the student is then 'read across' from the proposed model according to the GPA of the student.⁶
- 2.11 Providers were asked to make use of the GPA pilot reporting proforma to provide summarised data and to comment on the acceptability of the pilot scale. Providers also were asked to provide additional information regarding their preferred institutional approach to progression weighting⁷ (see glossary); their GPA implementation and consultation activities with relevant stakeholders; and, how they envisaged operational issues and regulatory matters would be affected through introducing GPA.
- 2.12 It is recognised that modelling retrospective data in this case has its limitations. In the field of assessment, student behaviour is likely to depend on the anticipated outcomes. Students may behave differently if they know that their assessment will be allocated a GPA score, so the students whose outcomes were being used retrospectively might have acted and performed differently if a GPA system had been in place. However, the project team judged that, despite this limitation, the data modelling would provide important information regarding an appropriate GPA scale.

4 There was the option to use a slightly amended version of the scale for 'quantitative' disciplines, such as STEM subjects; this scale differed in relation to the treatment of very high and low scores. The majority of institutions chose not to test the scale for quantitative subjects for a number of reasons: for example, institutions were already effectively using a 1-100 scale for all subjects, or it was thought that the distinction between quantitative and qualitative subjects is not typically clear-cut.

5 In all approaches, pass/fail modules were not included in the calculation of the GPA.

6 The 'transfer' approach was rarely used by the pilot providers to model their data.

7 It must be noted that providers were asked about this on the basis of the GPA replacing HDC rather than dual running of the two systems, so responses must be interpreted in the light of this.

- 2.13 The report, for the benefit of simplicity, will use the term 'first year' or 'year one' to refer to level four of the Framework for Higher Education Qualifications in England, Wales, and Northern Ireland and level seven or levels seven and eight of the framework for qualifications of higher education institutions in Scotland.⁸ It uses the term 'module' to refer to individual units or courses which contribute to a student's overall programme of study.

The findings of the pilot informed an analysis of potential ways forward and a summary of this process is given in Table 1: HDC only, dual running or GPA only.

Findings from the testing of GPA scales

- 2.14 Although there was general support from pilot providers for a GPA system, there were reservations concerning the grade point scale that was initially tested, particularly at the upper end and, to a lesser extent, at the lower end. During the pilot, a special interest group (SIG) of representatives from pilot providers was set up to explore particular issues arising in relation to the development of a GPA scale. Building on the work of this SIG and the pilot findings, four providers undertook additional testing on each of three modified scales on the same cohort of students as had previously been tested with the initial scale (i.e. the graduating 2012-13 cohort of students). The four providers were selected from different mission groups and UK nations.
- 2.15 On the basis of this evaluation and an acknowledgement of the importance of GPA scores generated being competitive in an international context, the following scale is recommended for adoption by UK higher education.

Table 2: Recommended GPA scale for UK higher education^{9,10}

Grade	Mark	Grade Point
A+	≥75	4.25
A	71-74	4.0
A-	67-70	3.75
B+	64-66	3.50
B	61-63	3.25
B-	57-60	3.0
C+	54-56	2.75
C	50-53	2.50
C-	48-49	2.25
D+	43-47	2.0
D	40-42	1.50
D-	38-39	1.0
F+	35-37	0.75
F	30-34	0.50
F-	≥29	0.0

⁸ www.qaa.ac.uk/publications/information-and-guidance/publication?PubID=2843

⁹ The scale's maximum grade point is 4.25 in common with some international providers. Grade points for marks below 40 take into account the practice of condonement or compensation (see glossary for definitions).

¹⁰ It is recognised that some institutions neither assess using a percentage scale nor using a grade scale identical to that in the recommended UK GPA scale. It will be necessary for these institutions to map their approach onto the scale in order to arrive at grade points and hence GPAs.





Part 3: The benefits of GPA

3.1 The limitations of the HDC are well documented (Universities UK 2007) and include:

- difficulty in representing the breadth of student achievement;
- insufficient differentiation between student performance;
- limited transparency in how the HDC is calculated;
- lack of international recognition.

The specific benefits of GPA compared to HDC are considered below. However, a GPA system cannot necessarily address all the perceived drawbacks of HDC and as highlighted in part four, certain features of HDC are valued by higher education providers.

Increased granularity

3.2 In 2013-14, over 50% of classified degrees across the UK were awarded an upper second¹¹ suggesting that this grade band disguises considerable variation in attainment. For example, there is a difference in achievement between a student gaining 60% overall and a peer who achieves 68% yet they may both be awarded a 2.i degree. Adoption of a GPA system can reveal these differences by providing greater granularity in a student's award; for example, 3.25, 3.47, 3.50 and so on. In addition, a 'cliff edge' has been created between the 2.ii and a 2.i classification. This means that achieving a 2.ii, although meeting the standard required for honours degree level qualifications, can often be considered a disappointing result by students (Universities UK 2007).

3.3 Increased granularity is seen as particularly beneficial to employers in the fair and effective selection of students for graduate jobs. Although employers use additional or complementary information, a recent survey of 200 companies (Vasagar 2012) found that 76% of graduate employers use 2.i as their threshold to sift through a high volume of applications. There has been evidence that employers use A-level scores because they no longer trust the HDC (Yorke 2008) and a more recent report identified that UCAS points continue to be used as a 'supporting indicator' to degree classification in recruitment decisions (Holland 2012). This is despite UCAS recommending that their tariffs should not be used as an indicator for employability¹² because the process discounts the value added by higher education. While it is possible that recruiters will create and adopt 'cut-off' scores using GPA, GPA offers a number of different potential 'cut-off' points and, hence, might entail a 'gradual slope' rather than a 'cliff edge' for students. A GPA system with a cumulative score available throughout a programme could be particularly helpful to employers because graduate recruitment processes can begin 15 months before a student completes their degree (see 4.29 below).

11 <https://www.hesa.ac.uk/component/content/article?id=3349>

12 <http://www.ucas.com/how-it-all-works/explore-your-options/entry-requirements/ucas-tariff>

Encouraging students' motivation and engagement throughout a programme

- 3.4 It is a reasonable expectation that the highly granular nature of a GPA score will have an impact on student motivation and engagement. Unlike the situation that may occur in working toward an honours classification, students will be able to influence their final GPA award with every assignment mark. For example, in the HDC system, final year students may know they are 'on course' for a 2.i but a first class degree is beyond reach. In this case, there may be little incentive to achieve the highest performance as it will not benefit their final award. In a GPA system, strong marks in final modules can increase their ultimate GPA score.
- 3.5 In addition, there may be a specific benefit for the engagement and achievement of first year students in comparison with the HDC if providers choose to use a traditional GPA system which averages marks from all modules and levels of study. Two institutions which already have enabled students to access their current GPA score as they progress through their programmes indicate a potential positive effect. They report that providing students with a simple, granular description of their ongoing performance appears to give students a feeling of greater control over their academic achievement, empowering them in their learning. One institution observed a small but statistically significant improvement in the overall performance of students in the first year of GPA implementation (see also 4.7 below). Although a similar approach could be adopted in an HDC system, in practice most providers either omit first year marks or assign them a minor weighting in a student's overall HDC result, for example because they seek in this way to reduce pressure on students during the transitional period of first-year undergraduate study and when they are embarking on new subjects.

International recognition and student mobility

- 3.6 UK students graduate into an increasingly global market place and therefore an effective system of measuring achievement at undergraduate level should be sufficiently flexible and internationally well-understood to ensure that UK graduates are best placed to compete in that marketplace. A GPA scale based on that of North America was adopted for the pilot because it has a long track record and is better-known globally than other GPAs. The calculation of the North American and many other GPAs, where a student's score is a 'straight average' of all their individual module marks, has the potential to be particularly comprehensible to students, employers and other stakeholders.
- 3.7 There are limitations to the contribution of GPA to international equivalence and student mobility. The variability of grading systems globally, including the wide range of GPA systems (Holland 2012) and variety in the grades that determine pass and fail, make comparisons of awards across nations difficult to achieve in a valid way (Soh 2011) although conversion tables¹³ are available to help students map scores from other higher education systems against a US GPA.

13 <http://www.universitiesintheusa.com/american-education.html>

Increased transparency

- 3.8 An important aspect of the UK context is the autonomy of individual providers to control the algorithms used to calculate a student's HDC. As Yorke (2008, p. 103) points out, providers benchmark their classification practices against comparable providers and make changes accordingly. This may lead to changed regulations; for example, in approaches to dealing with failed modules or the proportion of marks required to fall into the grade boundary to achieve a particular classification.
- 3.9 Therefore, there are two ways in which the HDC system can be considered less transparent than GPA. Firstly, for the individual student, there can be a lack of a transparent relationship between the marks given for assignments and examinations and the overall outcome achieved. For example, marks from modules may be weighted differently and there may be rules about the number of module marks that need to be in the 'qualifying class'. The Burgess Report (Universities UK 2007) noted that the rules for calculating HDC could be clearer in order to make it more transparent to students. A GPA system, with its simpler relationship between the grades gained and the final mark achieved, is intrinsically more transparent.
- 3.10 The second way in which the HDC system can be considered less transparent than GPA is in relation to institutional differences in classification algorithms. This means that while institutions use the same terms (e.g. 1st, 2.i), their methods for combining marks can differ significantly and those differences may not be transparent either to students or other stakeholders. External examiners are expected to comment on whether providers maintain threshold academic standards and the comparability of their standards with other UK higher education institutions (QAA 2011). However, they do not normally comment on how students marks are combined through their HDC algorithms although these are very influential in deciding the award outcomes for individual students (Yorke et al. 2008).



Part 4: Considerations in adopting a GPA system

- 4.1 Consultation with higher education providers took place through the involvement of 21 providers in the pilot exercise, and their comments were received on various aspects of GPA and implementation issues. In terms of general comments on adopting a GPA system, there was limited consistency, but several providers emphasised the importance of developing a nationally agreed scheme that would be introduced across the sector and the need to find out more through further consultation.
- 4.2 The following sections of part four set out the various considerations in adopting a GPA system. They draw on the data from the pilot modelling as well as the views of pilot providers on a range of matters. The latter includes information gathered from various stakeholders in institutions as well as associated groups such as employers or professional, statutory and regulatory bodies (PSRBs). The sections also draw on relevant literature, discussions within the Advisory Group and wider stakeholder consultations by the HEA. Whereas the modelling data is based on actual student marks, the opinions had to be based on a 'best guess' view of the likely consequences of adopting a GPA system. It is important to note that although providers were asked to comment on matters related to moving directly to a GPA system, a number also commented on the implications of running GPA in parallel with HDC, which we have termed 'dual running'. Comments on both approaches are discussed below.

Operational and implementation considerations

UK existing classifications and dual running

- 4.3 The pilot project was initiated to explore, among other issues, whether GPA could replace or complement the HDC as a preferable means of reporting student attainment. On that basis, the pilot testing was designed to model the GPA scores that students would have received, had their marks been in the form of grade points rather than percentages, with the translation from percentages to grade points being undertaken according to the pilot scale(s). An outcome was that GPA calculated by the standard 'straight average' approach was shown to measure different, and somewhat complementary, achievements to HDC. In particular, the modelling identified that outcomes can differ particularly where HDC algorithms weight attainment in different areas or stages of a student's course through 'profiling' and exam board discretionary judgement. This approach can recognise students' best, final or other achievements and discount or compensate for weaker marks.

- 4.4 The potential for 'dual running' was debated. 'Dual running' would involve providing students with two measures of achievement, a GPA and an HDC. A number of perceived benefits are envisaged for dual running:
- the presumed benefits of GPA (listed in part three) would be immediately available to students and other stakeholders as providers adopt the measure. Such benefits could be provided without the disruption to assessment policies and practices, and student record systems, which is expected to accompany a rapid change to GPA (see 4.7 to 4.17 for further information regarding the predicted changes needed);
 - dual running would allow providers to adopt GPA with regard to timescales that fit with their institutional context while maintaining a national award system;
 - dual running is likely to reduce any confusion for stakeholders brought about by an immediate transfer from HDC to GPA. This is particularly the case if GPA is not immediately adopted across all providers, which the pilot work suggested could be the case. A period of dual running would allow for appropriate communication to take place with all parties while offering many students a GPA grade with its greater international recognition;
 - a period of dual running would enable the sector to gain further information on the impact and operation of GPA, and the impact on student achievement and behaviour and staff behaviour, to inform the development of longer term and shared approaches to the GPA calculation;
 - organisations that use HDC results as measures of individual and institutional performance (e.g. employers, PSRBs, league table providers) would have time to make changes and develop benchmarks.
- 4.5 Dual running could be a permanent solution and is an accepted practice in other national higher education systems; for example, in Australia and Singapore students typically are provided with a GPA score with a classification awarded for honours level undergraduate study. There could be benefit in further exploration of these systems.
- 4.6 Pilot providers envisaged some potential challenges to dual running. However, the Advisory Group judged that, on balance, the strength of the perceived benefits of GPA alongside the continuity provided by retaining HDC for the immediate future outweigh possible disadvantages. The advantages and disadvantages of adopting dual running as compared with retaining the HDC or transferring immediately to GPA as the sole system are set out in Table 3.

Table 3: Summary of options – HDC only, dual running, or GPA only

Option	Benefits	Limitations	Summary
1. Retain HDC as the sole system	- established national system, familiar to many stakeholders; - recognised UK brand; - avoids costs and communication challenges of changing a system.	- lack of granularity and cliff edge of 2.i – 2.ii boundary; - limited transparency; - not widely recognised internationally; - lack of comparability across providers.	<i>Would not address key purposes of the GPA initiative.</i>
2. Dual running This would involve providers issuing students with both an HDC and a GPA score.	- introduces GPA with least disruption; - provides a measure of attainment with greater granularity; - provides for international comparability at a general level; - easy to provide students with their cumulative GPA score at regular points during their programme; - enables some testing and research on the calculation method for GPA without risk to the validity of the award system; - has the potential to offer students two alternative measures of achievement.	- potential for two parallel systems to confuse stakeholders; - need for students and relevant stakeholders to learn a new system; - systems development work necessary.	<i>Meets many of the purposes of the GPA initiative and would provide valuable evidence to inform the long-term implementation of GPA.</i>
3. Results only issued as a GPA score This would involve replacing HDC completely with a GPA system.	- simple, comprehensible, national system if adopted simultaneously across the sector; - provides a measure of attainment with greater granularity; - greater international comparability; - greater comparability between subjects and programmes; - potential for greater transparency in awards; - potential for greater student engagement and effort.	- considerable risk of fragmentation in the sector and confusion for stakeholders in the likely scenario that not all providers make the immediate transition to GPA; - major implications for institutional regulations, communications and workload.	<i>This option is unlikely to offer a national system in the short-term.</i>

Year one marks

- 4.7 A traditional North American GPA system entails the calculation of a 'straight average' of marks from all years of study. The pilot providers were invited to comment on the inclusion of first year marks. There was an eleven to four majority in favour of excluding first year marks in a GPA calculation, with some providers not selecting either option. The reasons given for excluding first year marks fell into two camps: those who wished to preserve a transition year, particularly for widening participation students, and those who thought it could discourage students from engaging in co-curricular and extra-curricular activities and taking risks by studying outside their discipline in the early stages. The reasons given for including year one were that it would encourage deeper student engagement in learning from the start, provide for greater international comparability, and benefit a provider's mature, part-time and highly motivated student body. In summary, among pilot providers there was a majority for year one modules to be excluded from a GPA measure if GPA was to replace HDC, with a minority taking the opposite view. Further research on the impact on student behaviour and achievement of different GPA models during a period of dual running of HDC and GPA could provide important data to inform institutional choices for the longer term. Early data from a pilot provider that already has adopted a GPA that includes first year marks, show a small but statistically significant improvement in students' first year results; the analysis demonstrated that, after controlling for gender, domicile, ethnicity, subject, age, and entry tariff, the average performance of first year students had improved by 0.8 percentage points after the introduction of GPA.

Exit velocity and weighting of different years/levels

- 4.8 Similar arguments were obtained for exit velocity (i.e. weighting the final level or levels of study to recognise achievement in the more taxing elements of the programme). Over two-thirds (14) of pilot providers stated that they would seek to retain exit velocity of some kind. There was a strong concern to recognise students' developed skills and attainment in the latter stages of their programmes and not to penalise them unduly for early weaker marks. In general, if GPA were to replace HDC, providers were keen to retain their existing patterns of weighting which were varied across and within providers.

Institutional regulations

- 4.9 Pilot providers were invited to comment generally on the potential impact of introducing GPA in place of HDC on their regulations as well as to comment on a number of specific institutional regulatory matters that may need amendment for a GPA system. The latter are discussed in the following paragraphs. In general, there was a consensus that change to institutional regulations would be required to adopt a GPA method, but there was some difference in views regarding the extent of the change envisaged and what it might involve. One provider that already has introduced GPA alongside HDC found that it had to make no changes to its regulations. In general, dual running was seen as offering less need to alter regulations than the adoption of GPA in place of HDC. Those who anticipated major change mentioned the need for a full review of regulations, or a significant proportion.

Extenuating circumstances

- 4.10 Extenuating circumstances are defined in the glossary (Appendix A). The pilot reports suggested two schools of thought in relation to extenuating circumstances. Participants from providers that apply extenuation at the module level thought that little or no change would be involved as a result

of introducing the GPA. Those from providers that apply extenuation at the award level or to classification boundaries expected to have to review their procedures in order to resolve how mitigation is fairly represented in the final GPA score. Given the variation in current approaches to extenuating circumstances, providers' decisions are likely to differ under a GPA system regarding the treatment of module marks where students' extenuating circumstances claims are accepted.

Progression, condonement, compensation and resit arrangements

- 4.11 The adoption of a GPA system may involve providers reviewing regulations regarding progression and awards, including arrangements for condonement, compensation and resits (see Appendix A for definitions of these terms). Marginal failure in many provider regulations can be accommodated provided it is counterbalanced by success elsewhere in the programme through rules of condonement and compensation. This issue has consequences for both resits and progression. The awarding of marks and grades for resits in a GPA system would also need consideration.
- 4.12 The pilot providers' comments on these matters were variable. Seven providers anticipated little or no change to their arrangements for progression and resits whereas a number did consider that significant changes would be needed. These were less about the practice of resits and more about the rules for marking recouped fails (e.g. awarding 'capped marks'), and progression and award rules, including condonement and compensation.
- 4.13 The recommended GPA scale (see 2.15) mirrors aspects of the HDC system in that there are gradations of fail marks. This means that grades below the pass threshold (D- to F-) are recorded (1.0 – 0.0) and can be used to calculate the students average grades. However, such marks do not normally accrue credit in the modules concerned.

Transfer of credit and study abroad arrangements

- 4.14 Credit transfer and treatment of periods of study abroad influence HDC outcomes. There are several points at which providers need to make decisions regarding credit obtained in another setting, provider or country. This may include periods of 'graded' study elsewhere as well as credit earned through work experience, placements or training. While providers currently have rules regarding the contribution of such credit and study periods to the HDC of students, new guidance or regulations would be required for GPA. For example, credit is usually accepted ungraded and therefore providers would need fair protocols for calculating the GPA of students in this situation. Likewise, decisions would be required regarding the treatment of study abroad credit. This would be at the discretion of providers.

The role of examination board

- 4.15 Examination boards may have a different function in a solely GPA system, particularly at the award level, because GPA scores are generated automatically and normally involve no professional judgement in relation to borderline cases. However, at module level, the resolution of borderline cases is likely to remain a matter of professional judgement for examination boards. The pilot providers were invited to comment on the anticipated impact of GPA on examination boards. Several considered that the impact would be minimal whereas others anticipated greater changes and reduction in their opportunities for discretionary judgement, even removing award-setting from their role leaving a focus on quality matters, such as learning and assessment.

Student record systems and notification of results

- 4.16 Several pilot providers anticipated major changes to student record systems in order to manage the transition to a GPA or dual running system. A number considered that there may be a useful role for a central sector body to liaise with the relevant software companies to ease this process and avoid multiple expensive adaptations at the institutional level.
- 4.17 Alterations in recording student achievement inevitably involve changes in notification of results. In general, providers indicated a need for technical system changes and a clear communication strategy, particularly during transition from HDC to GPA. Overall, the notification of results appears to present no major barriers to the implementation of a GPA system.

Validation and collaborative awards

- 4.18 Pilot provider feedback indicated a range of views on the impact of a move to GPA on validation and collaborative awards, but the operational issues were perceived as relatively straightforward. Providers differed in whether they would expect their partners automatically to adopt the degree-awarding body's scheme including, potentially, a GPA or dual running system. Where providers would expect their approach to awards to be reflected in collaborative arrangements or have a single set of prescribed regulations for the university and all partners, GPA would need to be taken into account in existing or future collaborative arrangements. The three partner colleges involved in the pilot noted that any application of GPA to their programmes would require discussion with the existing awarding body with that body having final authority over the award model adopted.

Conclusion

- 4.19 This review of the operational and implementation considerations in introducing a GPA system indicates that there are a number of matters over which higher education providers would exercise autonomy as they currently do with HDC. This would include internal decisions about their method for calculating GPA and a range of related policies and practices. Examples of these matters include:
- inclusion of first year marks;
 - exit velocity and weighting of modules from different programme levels;
 - compensation and condonement;
 - reassessed module grades;
 - extenuating circumstances;
 - transfer of credit and treatment of 'year abroad' and similar credit.

Marking and moderation practices

Academic staff marking and moderation

- 4.20 Some pilot providers indicated that they anticipate GPA to have some impact on assessors' marking behaviour with the likelihood that they would tend to 'back fit' their customary marking to a new scale given the internalised and tacit nature of academic judgement (Shay 2005). This could reduce the benefit of GPA in spreading marks across the full scale. Consequently, the pilot providers raised a range of cultural and developmental challenges related to assisting staff in accurately using a

new marking scale, and the associated assessment criteria and grade descriptors. Providers noted the need for staff development and effective quality assurance in order to change longstanding marking practices and cultures. Some providers viewed the introduction of GPA positively as a much-needed stimulus for a more thorough-going review of assessment practices. Assessors in institutions already using a shorter scale (e.g. 16-20 points) may be less affected if they are familiar with marking to grades rather than percentages. In relation to moderation, a majority of the pilot providers anticipated that a move to GPA would have little impact on current moderation practices, although some mentioned the importance of monitoring changes in the early stages.

Subject and professional discipline differences in marking

- 4.21 One anticipated challenge with GPA is the translation of grades in different subjects to a common metric, as grade distributions vary. This is particularly the case between qualitative (e.g. Arts, Humanities and Social Sciences) and quantitative (e.g. Science, Technology, Engineering, Mathematics) subjects. The pilot explored this issue by offering an additional 'quantitative' scale, which around a quarter of the providers chose to test. However, there was little evidence that this adapted scale proved helpful in tackling subject differences in grading. In addition, several providers reported that they would prefer not to move forward with two different GPA scales because it would be over-complicated or because the distinctions between qualitative and quantitative modules were not always clear-cut. The recommended scale (see 2.15) has been devised to minimise the impact of subject differences in marking patterns and reduce the variation created between those disciplines using an extended rather than a more restricted range of percentage marks.

Student performance

- 4.22 Concerns have been raised in the US that GPA systems can lead to grade inflation. However, the evidence shows that a GPA approach is not necessarily the source of higher grading patterns as they are evidenced across a range of approaches including HDC. Yorke (2008, p. 108) notes that the modal class of honours degree shifted from 2.ii to 2.i between 1973 and 1993. More recent UK data reveals a rise in the proportion of first and upper second class degrees rising from 62% in 2008-9 to 70% in 2013-14¹⁴ with a 14% and 6% increase in firsts and 2.i awards respectively between 2012-13 and 2013-14¹⁵. In contrast with the US, the UK literature does not link this trend to a relationship between student evaluations and academic promotion. Yorke (2008) notes that improvements in student achievement may have several causes including better entry qualifications, modularisation providing students with ongoing information on performance, better guidance and greater proportions of coursework. In other words, improved grades may be legitimate 'grade increase' rather than 'grade inflation' unwarranted by higher student performance (Hu 2005). On the other hand, grade inflation experienced in the UK may relate to changes in degree award algorithms by providers wishing to align their results' profile with comparable institutions (Yorke et al. 2008) and be directly associated with the HDC approach to calculating students' classification.

14 http://www.hesa.ac.uk/dox/pressOffice/sfr197/280607_student_sfr197_1213_table_9.xlsx and <https://www.hesa.ac.uk/sfr210>

15 <https://www.hesa.ac.uk/sfr210>

- 4.23 UK higher education is objectively in a robust position to control grade inflation. Despite steady increases in students achieving a 'good' degree, UK grade distributions still tend towards normal distributions, and marking criteria, internal moderation, external examiners, annual monitoring reports, and institutional review by the Quality Assurance Agency for Higher Education (QAA) provide tools to control unwarranted upwards creep of grades.

Student behaviour

- 4.24 The Burgess Report (Universities UK 2007) noted that all systems that rely upon a summative judgement can encourage students to focus on the final mark. The relatively free structure of most degrees in the US allows greater module choice by students. In the UK, programmes are generally more structured and students are less able to pick and mix modules to select those perceived as being less demanding or having higher grade profiles. Well-developed quality assurance in the UK is a stabilising factor in preventing student module and assessment choice being overly influenced by marking outcomes.

Student appeals

- 4.25 There has been a general rise in student appeals and complaints in recent years although the trend has stabilised most recently (OIA 2014). These include appeals against marking and assessment decisions. The combination of raised student fees and the use of the 2.i. boundary in recruitment are considered to be causes of this concern to maximise grades. One expectation is that GPA might slow the growth in appeals as the 2.i-2.ii 'cliff edge' would be removed. However, the opinion of a majority of pilot providers was that appeals are likely to increase under the GPA system, at least initially and especially at the level of individual modules. This suggestion was largely based on the assumption that 'every grade counts' and has the power to improve or reduce a student's GPA. As yet, we have little data to substantiate predictions regarding appeals, although one institution that recently introduced dual running of GPA and HDC experienced no increase in appeals.

Stakeholder considerations

Students

- 4.26 The pilot project took an active approach to engaging students about the issue and all providers reported communication with them, albeit of varying scope and formality. Students were involved in institutional working groups and HEA facilitation meetings. Benefits of GPA identified by students were: increased granularity, a better idea of their ongoing performance, gaining reward for first year effort and assisting global employability. Students' concerns were various and contradicted those in favour on some points, such as mixed views on inclusion of year one marks. Concerns also included questions about how GPA will affect employers' recruitment practices. In general students did not want their institution to be out of step with the rest of the sector and particular concern was expressed about the possibility of their institution moving to GPA alone without such a move being made in at least a significant number of other institutions.

Staff, employers, and PSRBs

- 4.27 All pilot providers reported some consultation with academic staff although for a majority this was limited to those participating in either specific groups associated with the pilot, relevant committees or higher level groups, such as senate. Seven providers reported more extensive communication with academic staff involving online surveys, focus groups, presentations and discussion at relevant staff conferences and meetings.
- 4.28 Feedback from those academic staff whose views were reported (and by implication some external examiners) included: the importance of adopting a single scheme across the whole sector; using an agreed GPA scale; resolving issues of consistent implementation of the GPA scale across the sector; managing workload increases; paying attention to marking practices and developing stakeholder understanding. Administrative staff feedback included relatively positive views about the capacity of student record systems to adapt to GPA, with some concerns expressed about the impact on assessment processes, staff workload and student understanding.
- 4.29 There were no strong themes in the feedback from employers although they emphasised the importance of consistency of implementation across the sector to make a GPA system viable. It was recognised that employers can be varied in their recruitment practices. Providers suggested that large graduate employers would quickly adapt to a new system, but smaller businesses may need more information and support from providers to understand the changes. Holland (2012) also noted that employers are slow to embrace new qualifications, although there are indications that graduate recruiters increasingly are making use of the HEAR¹⁶. HEA consultation with the Association of Graduate Recruiters (AGR) identified that employers use other indicators as well as HDC in recruitment decisions, but would appreciate increased transparency. GPA as a cumulative measure could be particularly helpful to them because graduate recruitment processes can begin well before a student graduates.
- 4.30 The limited consultation with PSRBs revealed some to be in favour of implementing GPA because it would offer a more accurate representation of students' achievement than HDC and would alter students' perceptions of their degree experiences, promoting the idea of a degree as a continuum of performance.
- 4.31 Overall, stakeholders welcomed more consultation and input prior to implementation of any new or modified system. The pilot providers considered that the development of widespread stakeholder understanding and commitment would require clear communication messages to be sustained over a number of years.

¹⁶ Early perceptions indicate that both large graduate recruiters and small and medium size businesses are showing considerable interest in the use of the HEAR for a more targeted and effective graduate employment process. The potential for searching across a range of academic and non-academic achievements allows employers to identify students based on specific requirements rather than more broad-brush criteria, such as degree awarded and subject studied. A GPA score, as with a degree classification, can form part of the HEAR for use by employers in this way.



Part 5: Conclusions and recommendations

- 5.1 The programme of work reported here was established to enhance awareness and understanding across the sector of issues related to the potential introduction and use of GPA, and to inform institutional decision-making and planning.
- 5.2 On the basis of the evidence set out in this report, the following recommendations were determined.

Recommendation one: a single GPA scale for UK higher education should be adopted by all UK providers.

Table 4: The GPA scale for UK higher education

Grade	Mark	Grade Point
A+	≥75	4.25
A	71-74	4.0
A-	67-70	3.75
B+	64-66	3.50
B	61-63	3.25
B-	57-60	3.0
C+	54-56	2.75
C	50-53	2.50
C-	48-49	2.25
D+	43-47	2.0
D	40-42	1.50
D-	38-39	1.0
F+	35-37	0.75
F	30-34	0.50
F-	≥29	0.0

Recommendation two: ‘dual running’, during which both GPA and HDC outcomes will be reported, should be introduced in the first instance. This should be followed by a national review of the adoption of GPA after a period of no more than five years. Institutions may opt to switch to GPA alone when and if they judge appropriate.

Recommendation three: degree awarding bodies will need to exercise institutional discretion on a range of regulatory and policy matters associated with their GPA award system.

Provider discretion and the GPA methodology

- 5.3 The recommendation to adopt a GPA system in UK higher education rests heavily on its benefits in terms of greater granularity of student awards. In addition, the GPA 'methodology' (see 1.11) selected by degree awarding bodies will influence the extent to which the recommendations address perceived weaknesses in the HDC approach, especially the degree of transparency in GPA calculations, comparability of GPA scores across programmes and providers, and international equivalence. The achievement of enhancements to the UK award system in these areas are key purposes of the GPA initiative. As the pilot has shown, different approaches to calculating a student's GPA produce different outcomes in terms of transparency and comparability, and providers may wish to take this consideration into account in choosing their GPA methodology as appropriate for their institutional mission and objectives.
- 5.4 While these choices are within the discretion of providers, it is suggested that it should be an aspiration of the sector to explore greater commonality in a GPA calculation than is currently the case with HDC because of the important implications in terms of fairness to students. A period of dual running would allow the sector to gather and evaluate data on the impact of different approaches to GPA on student behaviour and achievement. This evidence may provide the sector with greater confidence to develop a national GPA calculation. Table 5 sets out the implications of different methodologies for calculating GPA scores.

Table 5: Advantages and disadvantages of different methodologies for calculating GPA

	Advantages	Disadvantages
GPA calculated separately from HDC but mirrors provider's algorithms. This means that providers would calculate the GPA from the raw module marks in a way which reflects institutional choices regarding omission of module marks (e.g. year one or lowest scoring module), weighting different marks (e.g. exit velocity) and patterns of condonement and compensation.	• providers able to adopt a GPA system to suit their mission, subject mix and student body (e.g. excluding 1st year marks, and including condonement and exit velocity); • providers able to change their GPA system in response to wider sector drivers; • may provide best match between HDC and GPA outcomes during a transitional period.	• the limited transparency of HDC might be transferred to GPA; • limits consistency and comparability across UK providers (different algorithms for different providers); • risks proliferation of many different approaches to calculating GPA across the sector; • reduced international comparability in GPA calculation.
GPA calculated using straight average of module marks. The GPA is calculated using all contributory module marks with no omissions and no weighting except for credit weighting. All providers would use the same calculation.	• uniform national system; • easy to provide students with their cumulative GPA score at regular points during their programme; • calculation reflects GPA of dominant North America model; • transparency; • comparability across providers.	• potentially limits institutional flexibility and discretion in GPA; • differences between HDC and GPA results may need explanation to stakeholders, for example employers.

Next steps

5.5 The following areas of activity should be a focus in the short and medium term:

- wide dissemination of this report by the Higher Education Academy to the UK higher education sector;
- further debate and consultation by the sector and key organisations regarding the recommendations;
- provider institutions to engage widely with their students, staff, external examiners, partners and other stakeholders regarding GPA adoption and choices;
- dissemination and consultation with a wide range of external stakeholder groups, including employers and professional, statutory and regulatory bodies (PSRBs);
- development of guidance and support regarding GPA and dual running aimed at stakeholder groups including students, academic and administrative staff, external examiners, employers and PSRBs.

Conclusion

5.6 A GPA system, dual running in the first instance with HDC, should not be viewed as a solution to all concerns associated with reporting student achievement or higher education assessment more generally. However, it does provide an opportunity to complement and add value to existing practice including use of the HEAR. Therefore, the GPA Advisory Group recommends introducing a GPA system into UK higher education, using a common agreed scale, for its benefits in terms of greater granularity of awards, international recognition, and its potential to encourage student motivation and engagement. A period of 'dual running' of GPA alongside HDC has a range of advantages in comparison with an immediate change to GPA as the sole system. In the longer term, GPA has the potential to provide greater transparency and comparability regarding student awards across subjects, programmes and providers than is currently offered by the HDC system.

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Appendices

Appendix A: Glossary

Algorithm – used to refer to the sequence of calculations that comprise the process for determining a student's degree classification. They typically involve some element of weighting of marks from different levels of the programme and averaging of marks. They may also involve rules regarding omission of some module marks (e.g. year one or lowest scoring module) condonement and compensation and may involve elements of discretionary judgement at the boundaries of each classification. HEIs have the autonomy to set their own algorithm guided by the UK Quality Code for Higher Education.

Capped marks – this refers to marks that are recorded at a lower level than the work may have deserved. Typically, this would apply to a student who retakes a failed assessment and produces work that deserves more than the pass mark. However, as it is a resit rather than a first attempt at the assessment, only the pass mark is recorded.

Co-curricular – this term is used to refer to activities, courses and experiences that complement the formal curriculum. They are linked to, mirror or extend formal learning. They are distinguished from extra-curricular activities that may not be directly related to the formal curriculum.

Compensation – definitions of compensation vary between higher education providers and are sometimes the same as the definition of condonement used elsewhere. Commonly it is defined as the process by which an assessment board may decide that a strong performance by a student in one part of the curriculum may be used as the basis for the award of credit in respect of a failed performance elsewhere.

Condonement – definitions of condonement vary between higher education providers and are sometimes the same as the definition of compensation used elsewhere. Commonly it defined as the process by which an assessment board, in consideration of the overall performance of a student, decides that without incurring a penalty, a part of the programme that has been failed does not need to be redeemed.

Exit velocity – see **weighting**

Extra-curricular – this term contrasts with co-curricular in referring to activities, courses and experiences which may be offered or co-ordinated by the provider; but may not be explicitly connected to academic learning.

GPA – Grade point average: see 1.9 for a description.

GUI – refers to the Group of Interested Universities; a small group of providers who began an exploration of a common GPA system as a potential alternative to the honours degree classification in advance of the pilot programme reported here.

HDC – honours degree classification.

HEAR – Higher Education Achievement Report. The HEAR has been developed to provide a rich record of student achievement at university including curricular and accredited co-curricular and extra-curricular achievements. It is being used by an increasing number of universities. It encompasses the degree transcript and degree classification and provides information and content that meets the requirements of the European Diploma Supplement. The HEAR record can, in principle, include any summative judgement of student academic achievement including either a degree classification or a GPA, or both of these (see <http://www.hear.ac.uk/> for more information).

Mirroring – refers to where the grade point average ‘mirrors’ the provider’s honours degree classification algorithm. That is, GPA is worked out from the individual module grade points using the same exit velocity weighting, the same approach to year one modules, together with any other factors in determining the current honours degree classification.

Progression – refers, in the higher education context, to students’ movement between levels of study during their programme. Typically, students have to pass a specified amount of credit before they can progress to the next level and this may be affected by rules regarding, for example, core modules, condonement and compensation. See ‘weighting’ below for further explanation.

Quantitative and qualitative assessment methods – refers to the contrast between coursework, examination and other performances used for assessment in different subjects and professional disciplines. ‘Quantitative’ refers to tasks that can lead to exact, more predictable, or closed outcomes, and are more likely to be used in science, technology, engineering, mathematics and related professions. Qualitative refers to more open-ended tasks offering less predictable outcomes or varying responses and these are more common in the arts, humanities and social sciences, as well a number of professional areas. In practice, the pilot found that many programme involve both types of task and a clear distinction was not easy to achieve.

Straight average – refers to a GPA score devised by calculating the average (mean) for all contributory module marks with no omissions and no weighting except for credit weighting. This methodology for calculating GPA is typical in many higher education systems, such as the United States.

Weighting (or progression weighting) – refers to the process of according greater or lesser importance to the marks from certain modules in the calculation of a degree classification or other overall grade. A specific example of weighting is exit velocity. This refers to the common practice in UK higher education providers of weighting the contribution of marks from the final level or levels of study to reflect students’ performance in the latter stages of their programme. The purpose is to recognise their achievement in the more taxing elements of their programme while providing some reward for earlier work. For example, a three year degree classification might be calculated by weighting each level as follows: level four (year one) 0%; level five (year two) 30%; level six (year three) 70%. Four-year programmes typically employ similar weightings towards the final year/s.

Appendix B: The HEA's national GPA Advisory Group

The membership of the HEA's national Advisory Group, chaired by Professor Sir Robert Burgess, was designed to ensure the participation and input of senior representatives of key stakeholder groups from across the UK higher education system, including students, providers, employer bodies and other agencies.

Professor Waqar Ahmad, Deputy Vice-Chancellor (Academic),
Middlesex University

Matthew Andrews, Academic Registrar,
Oxford Brookes University

Professor John Annette, President,
Richmond University

Professor Jeffery Bale, Pro-Vice Chancellor (Education),
University of Birmingham

Professor Val Belton, Associate Deputy Principal,
University of Strathclyde

Professor Sir Bob Burgess, former Vice-Chancellor,
University of Leicester (Chair)

Professor Joy Carter, Vice Chancellor,
University of Winchester

Professor Graham Curtis, Student Assessment and Classification Working
Group and HEA Academic Associate

David Docherty, Chief Executive,
National Centre for Universities and Business

Bethan Dudas, Policy Engagement Manager,
National Union of Students (NUS)

Professor Michael Ewing, Dean of Students (Academic),
University College London (member of Group until July 2014)

Justin Edwards, Assistant Chief Executive and Director of Curriculum,
Belfast Metropolitan

Professor Alan Ford, Pro-Vice Chancellor (Learning and Teaching),
University of Nottingham

Stephen Isherwood, Chief Executive,
Association of Graduate Recruiters

Professor Denise McAlister, Pro-Vice Chancellor
(Learning, Teaching and the Student Experience), Ulster University

Dr Alastair McClelland, Senior Lecturer,
University College London

Professor Lorna Milne, Principal,
University of St Andrews

Dr Jayne Mitchell, Director of Research, Development and Partnerships,
QAA succeeded by Dr Tim Burton, Acting Head of Standards, Quality and
Enhancement, QAA

Professor John Raftery, Pro-Vice Chancellor (Student Experience),
Oxford Brookes University (member of Group until March 2014)

Professor Nigel Seaton, Principal and Vice Chancellor,
University of Abertay Dundee

Professor Elizabeth Stuart, Deputy Vice Chancellor,
University of Winchester

Professor Oliver Turnbull, Pro-Vice Chancellor (Learning and Teaching),
Bangor University

Greg Wade, Policy Adviser,
Universities UK

Rachel Wenstone, Vice President (Higher Education),
National Union of Students (NUS) (member of Group until 2014)

Andy Westwood, Chief Executive,
GuildHE

Professor Paul White, Deputy Vice-Chancellor,
University of Sheffield

Jo Wood, Assistant Registrar,
University of Leicester

Appendix C: About the GPA programme of work

Grade Point Average: Report of the GPA Pilot Project 2013-14 was produced by the Higher Education Academy in consultation with the National GPA Advisory Group. The report is published as an outcome of investigations and discussions involving higher education providers and key stakeholder groups across the UK that have been engaged in the GPA programme of work 2013-15.

HEA GPA programme group

Professor Sue Bloxham, HEA Academic Associate
Andrew Fleming, Academic Development Officer, HEA
Professor Philippa Levy, Deputy Chief Executive, HEA (*Chair*)
Dr Erica Morris, Consultant in Academic Practice, HEA
Dr Geoff Stoakes, Head of Research, HEA

Higher education providers that participated in the pilot project

Bangor University
University of Birmingham
University of Edinburgh
Hull College
Kingston University
University of Leeds
University of Leicester
Northumbria University
City College Norwich
University of Nottingham
The Open University
Oxford Brookes University
Richmond, the American International University in London
University of Sheffield
University of Southampton
South West College (Northern Ireland)
University College London
University of the West of England
University of the West of Scotland
University of Winchester
York St John University

**Wider group of higher education providers that expressed interest
in the project and attended facilitated meetings**

Aberystwyth University
Aston University
Birkbeck, University of London
Birmingham City University
Bishop Grosseteste University
De Montfort University
Guildhall School of Music and Drama
Harper Adams University
Keele University
King's College London
Lancaster University
Leeds Metropolitan University
Liverpool John Moores University
Newman University
Nottingham Trent University
Plymouth University
Queen's University Belfast
Southampton Solent University
Staffordshire University
University of Aberdeen
University of Glasgow
University of East Anglia
University of Hertfordshire
University of Hull
University of Liverpool
University of Portsmouth
University of Stirling
University of West London
University of Westminster
University of Wolverhampton
University of Worcester
University of York

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