GRADUATE OUTCOMES
SURVEY METHODOLOGY

PART ONE:
HISTORY AND BACKGROUND
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Part one of the methodology statement contains the history and background to the development of the Graduate Outcomes survey. It outlines the process HESA went through to review the need for a replacement to previous iterations, how we engaged with the sector on its design and the intended governance structure.

Part two of this statement details the most important aspects of survey design, data collection, analysis and dissemination for Graduate Outcomes. It is aimed at the users of Graduate Outcomes survey data as well as those with an interest in survey methodology. View the methodology statement part two: survey design and implementation.

Please refer to our glossary page on the HESA website for definitions of terms used in this document.
There is a longstanding requirement from Higher Education Providers (HEPs), the Government, and wider civil society, to understand the outcomes and destinations of students in Higher Education. This was previously managed through the Destination of Leavers in Higher Education (DLHE) population survey at six months following graduation and its longitudinal follow-up sample survey (Longitudinal DLHE or LDHLE).

The results of the surveys are used for a number of high-profile purposes. These include the following, which we gathered evidence for:

- **Economically important activities:** This data is used in commercial, journalistic and public information products that ‘rank’ or ‘sort’ universities by user-defined criteria and thereby seek to inform consumer choice. Examples include league tables, the Prospects website and the new Discover Uni service. HE sector responses to these indicate that this data shapes the market.

- **There are frequent questions from policymakers regarding graduate destinations in each of the UK’s democratic legislative bodies and HESA data is the most commonly used source that government departments use in answering these questions.**

- **Data is used by Local Authorities, Local Enterprise Partnerships (LEPs) and city regions to understand their access to graduate-level skills and to shape local economic and social policies.**

- **Graduate employers and their associations use this data to determine and support the graduate talent pipeline.**

- **Collection of graduate outcomes data is required by HE funding and regulatory bodies to discharge their responsibilities. The requirement to collect the data is backed by legislation and forms a condition of accountability and assurance for regulation and government-backed student funding in all parts of the UK. The TEF (Teaching Excellence and Student Outcomes Framework) is an example of a high-profile regulatory tool that uses data derived from this source.**

- **Rankings drawn from HESA data are used by some overseas governments to direct student funding, and these decisions affect the UK market structure and education exports, in one of the UK’s high-performing export industries.**

- **The annual release of statistics on graduate outcomes generates substantial coverage across the popular and specialist press, including television and online media outlets.**

- **Researchers use graduate outcomes data to understand and evaluate aspects of higher education.**
The first stage, or Early Survey, was a population-level survey, which aimed to find out what leavers were doing six months after they qualified from their HE course. The HESA DLHE record has been collected from 1994/95 onwards from constituent HEPs in the devolved administrations of the United Kingdom and, prior to 2002/03, was known as the First Destinations Supplement (with slightly different coverage). The DLHE record collected data on the personal characteristics of leavers, the details of their current employment and the courses they completed, in respect of all successful leavers of the reporting HEP six months after their completion of study. The data submitted in the record was obtained through a survey instrument, centrally defined by HESA and locally managed by HEPs. HESA treated this as an administrative data source and quality assured the data in a similar way to other administrative data and business survey data it collects.

The second stage, or Longitudinal Survey (LDLHE), was a follow-up sample survey that aimed to find out what leavers were doing a further three years on. The LDLHE was conducted on a biennial basis, from the academic year 2002/3 to 2012/13. It was a centrally-managed stratified sample survey of graduates, co-ordinated and planned by HESA and managed and run by a contractor (IFF Research).

Full details of the collection approaches for the DLHE and LDLHE can be found in the relevant coding manuals in HESA's coding manual archive.
Numerous reviews had taken place over time to adapt the DLHE and LDLHE to fit changing needs. The Graduate Outcomes survey marked an extensive evolution of the DLHE/LDLHE approach to meet the longstanding needs outlined above. In addition, through public consultation, HESA observed a very high level of agreement that a census survey was needed, and that its profile should be raised further, especially given the development of the Longitudinal Educational Outcomes (LEO) dataset and its application in higher education. It appeared that users perceived this dataset becoming more important in the future.

Between July 2015 and June 2017, HESA conducted a major review of our destinations and outcomes data, referred to as the NewDLHE review. The review began using a piece of policy landscape analysis referred to as the “remit” for the review. This document identified four key drivers of change, that ought to be addressed through an exploratory review.

These were:

1. **Future-proofing** – a fundamental reconsideration of the kinds of data that will be required for the foreseeable future, taking into account a labour market that is changing at a structural level and increasing demands for rich information about graduate outcomes.

2. **Efficiency** – taking advantage of new capabilities to link data sources and use modern survey technology to increase value for money and reduce the cost of acquisition.

3. **Fitness for purpose** – ensuring the data collection methodology allows the data to be used in new and emerging contexts, with confidence.

4. **Supporting legislation** – by taking into account the legal gateway opened by the Small Business, Enterprise and Employment Act (SBEE Act) and supporting developing government purposes for destinations and outcomes data, across the UK.

The remit proposed a series of research questions that the review was to answer. The review was conducted as a piece of deliberative public engagement, with a transparent approach to discussion, evidence-gathering, and decision-making.

Needs were identified using the following main mechanisms:

- **Policy analysis.**
- **Establishment of an appropriate governance structure and use of HESA’s organisational governance.**
- **Involvement of key stakeholders in a working group.**
- **Running events and attending third-party events and meetings to discuss needs and methods with stakeholders.**
- **Commissioning two separate research reports.**
- **Undertaking two public consultations and publishing both summaries of responses and findings from each.**
- **Undertaking an administrative data quality assurance self-assessment exercise in line with the expectations of the Code of Practice for Statistics.**

These approaches led to findings that were synthesised into the publication of a final model.

Accompanying the model, we published a rationale for the decisions that we made during the review. The rationale offered our answers to the review questions set in the remit document and provided the reasoning behind design decisions, such as the development of the graduate voice questions and the decision to centralise the survey.

Requirements for the survey outputs were principally to contextualise data from new sources such as LEO, which have very complete data on a small number of variables, but lack the rich breadth of data in the Graduate Outcomes survey. Many of the outputs developed from the DLHE data were seen to have value, and so our approach to designing outputs was to iterate from the DLHE approach, making improvements where richer data allows, and to follow established standards where possible.

The model developed was the business case for the ‘design’ stage to take place, which would then go on to develop the model into a fully-featured design for a new survey. The detailed design stage challenged some aspects of the model and caused some elements to be modified or delayed. These are detailed later on in this report.

A full archive of the review materials is available on the HESA website.
CONSULTATIONS

We ran two public consultations to gather input into our plans during the NewDLHE review. Our first consultation ran in the summer of 2016 and invited respondents to comment on the top-level principles behind collecting outcomes data. Our second consultation on our detailed model ran between March and April 2017.

CONSULTATION ONE – SUMMER OF 2016

We invited all interested parties to explore the desirable characteristics for a future replacement for the DLHE survey. We explained that we aimed to identify the features of a data product that supported the aims of a wide range of uses and users. We also wanted to gauge support for some of the ideas we presented as tentative proposals. To aid a deliberative and exploratory approach, we explained that later on there would be a time for sifting, analysing and refining ideas to produce a deliverable data product and a further consultation around that.

At this early stage, we wanted to engage all interested parties in a wide-ranging debate about what the future of student destinations and outcomes data should be: to play a part in shaping the settlement for data about graduates, to support public information, policymakers’ decisions and our collective understanding of the role of graduates in the economy and society, for the long-term.

We received a total of 206 valid responses and we published a summary of the responses. Overall, it offered strong support for the use of linked data, for the continuation of a census survey, and for a change to the timescales of deployment to a single survey at between 12 and 18 months.

There was also strong endorsement for the high-level scope of the survey, proposing both continuation from the topics covered in L/DLHE, but also with very strong support for new measures of graduate outcomes, and the addition of measures around graduate entrepreneurship and placements. We also revealed the findings of the costing exercise that we had conducted as a part of the first consultation survey, which revealed the full costs providers faced in delivering the distributed DLHE survey, based on a sample of 111 detailed costings.

CONSULTATION TWO – MARCH TO APRIL 2017

The second consultation offered an opportunity for stakeholders to comment on the draft model proposed in response to our review findings and to indicate their support for it. The model we proposed was synthesised from the many sources of expertise that fed into the review.

The second consultation received 187 responses and delivered a clear mandate to proceed to implement our proposed model. Some of these outcomes included:

- We received strong support for our proposed survey design with over 80% in favour.
- Over 70% were in favour of the implementation plan.
- The survey practicalities, including the open centralisation methodology, received solid support with over 60% in favour.

View the final report on consultation one.
Comments received were supportive of the direction of travel, although a number of queries and concerns were raised on aspects of the model. We continued to publish responses to questions and issues raised by stakeholders.

Some of the issues raised reflected the complexities involved in moving from a devolved model to a centralised one. An example is the position on response rates. Under the administrative data model of DLHE, stratified response rate targets for sample groups defined by qualification aim and domicile were closely monitored. Under LDLHE, the sample survey contractor achieved a high response rate. However, given the unique nature of the proposals (the closest parallel is the Australian Graduate Outcomes Survey, which achieves c. 39% overall response rate at 12 months from an online-only survey), we could only offer a guide to our approach, establishing a 70% target response rate as a challenging target to be kept under review.

Subsequent work during the implementation focused more on reducing the potential for bias in the survey through various approaches and ensuring that the survey is managed according to professional standards for quality assurance of surveys. These necessarily place the achievement of high response rates alongside other important quality factors, such as ensuring appropriate approaches to call prioritisation and incentives, identifying the approach to be taken in producing confidence intervals for our findings and producing survey weights. Papers on these matters have been produced by HESA’s statistics and econometrics staff subsequently and discussed by the Graduate Outcomes Steering Group extensively.

View a summary of findings of consultation two.
EVOLUTION FROM DLHE TO A CENTRALISED SURVEY

Following what we learned from the first consultation, we completed a review of the suitability of the DLHE for retaining National Statistics designation. Methodological considerations had been raised in both the remit for the review and by respondents to the consultation. We knew that the DLHE needed to be perceived as highly trustworthy, but we wanted to understand what this would entail in practical terms. The analysis of the suitability of the DLHE for official statistics purposes offered us a framework in which to consider these issues and followed recognised good practice.

Given the extensive public uses of graduate destinations and outcomes data, it was vital that there was a high level of confidence in the robustness of the data, commensurate with retention of National Statistics designation. Therefore, the highest standards of quality should be assured in its production. The design of the NewDLHE needed to deliver a comprehensive level of assurance and HESA should produce a design that met this requirement. In terms of the UK Statistics Authority’s quality assurance matrix, this meant that we should aimed for the assurance level “A3 – Comprehensive assurance” in order to be fully compliant. This would align with other data with a high level of public interest.

QUALITY ASSURANCE SELF-ASSESSMENT

We undertook a quality assurance self-assessment of the DLHE as HESA would seek to maintain National Statistics designation for its equivalent to the DLHE Statistical First Release (SFR – now referred to as a “Statistical Bulletin”) under any future data source resulting from the review. To maintain this designation, as well as wider public trust in the data, HESA confirmed that it should be aiming for the highest assurance level possible. In terms of the UK Statistics Agency’s quality assurance matrix, the aim should be to achieve “A3 – Comprehensive assurance”. The DLHE survey was judged to not meet this standard. It is mostly at “A2 – Enhanced assurance” level with some aspects at “A1 – Basic assurance” and some at “A3 – Comprehensive assurance”.

In DLHE, many providers chose to outsource data collection to a third party contractor. In this situation, the contractor was responsible for collecting data under contract to the provider, exclusively. Decisions about the implementation of the methodology that might conceivably introduce bias could occur as a result of operational decisions by the contractor and provider. These effects were not necessarily visible to HESA and in some cases may not have been recognised as significant, as the implementation was dependent on a distributed workforce with varying resources and skills.

The self-assessment made several recommendations to achieve comprehensive assurance. The key recommendation was the need to reconfigure the former DLHE methodology to further enhance quality assurance mechanisms. We took this into account when deciding how to develop a model. We determined that the majority of necessary methodological improvement could be achieved either through a centralised approach, or through a substantially enhanced audit process. An audit process would investigate processes and practices, backed up by an enhanced analytical quality function at HESA and the publication of materials generated through these processes. If the collection process is distributed, then this process must necessarily include a substantial sample re-survey.

We compared options for delivering the survey either on a centralised basis or continuing with a distributed model. The quality assurance self-assessment followed the ONS guidelines, and explains the work that was done to determine the required features of the Graduate Outcomes survey. These changes were agreed as the outcome from a major review process, which we also cover in more detail elsewhere.

For Graduate Outcomes, HESA and our suppliers collect survey data directly, to produce Official and, subject to assessment, National Statistics. HESA is accountable for this both to our customers and directly to the Office for Statistics Regulation. Methodological decisions will be dictated by what is in the interest of our users and in line with the Code of Practice for Statistics. The performance of our suppliers is subject to ongoing standardised quality assurance supported...
by consistent Key Performance Indicators (KPIs). Issues in collection will still occur as they did previously for providers, but we have the advantage of a central concentration of statistical skills to recognise, address, and correct for these issues, systematically. Our oversight also makes subjecting the survey to continuous improvement more practical and efficient.

The open centralisation model retains much of the control and oversight that HE providers previously had over the data collection process, while ensuring the methodology is applied systematically and openly by a trusted third party (HESA). It was designed to create system-level efficiencies and agility that can be shared widely and funded fairly. The decision to pursue the open centralisation model was ultimately taken by HESA governance mechanisms and reflected the best value option available to meet requirements.
In DLHE, the survey was focused on employment and employment activity. Graduate Outcomes aimed to give a wider understanding of the graduate journey. We identified the LDLHE questions as falling into the following broad categories:

- Types of activity: employment, study, travelling, etc. (all and the most important one).
- Employment (including the job title, duties, salary, employer and location, motivations and how the role was obtained). The Standard Industrial Classification (SIC) of the employer and Standard Occupational Classification (SOC) of the role are both derived from this section.
- Further study (what is being studied, where and how funded).
- Graduates working in regulated professions (for linking purposes).
- The HE experience and preparedness for future activity.

We asked about the continuing appropriateness of these areas in the first consultation and received strong support for continuity, subject to iterative improvement. Detailed consultation responses and feedback from other sources helped us to improve on the DLHE question set. We also committed to commissioning cognitive testing of the proposed question set, to ensure that it was fit for purpose. The details of this are covered in part two of this methodology statement, including links to the published findings.

One exception was for the hypothetical questions on work-preparedness. These were deemed to be unnecessary and we resolved to remove them.

LDLHE / DLHE questions had been in use for many years and had in most cases proved their reliability. The model we designed in large part aimed to set these same questions in a more logical routing structure, which would preserve the best of the LDHLE / DLHE approach, while allowing richer data to be accumulated. It would also address known deficiencies of those surveys, such as the absence of almost all information about graduates not currently in employment as one of their activities.

The New DLHE review archive is available in the New DLHE review archive.

A NEW MEASURE FOR GRADUATE SUCCESS

We sought feedback on outline proposals for developing a new measure of graduate success. The first consultation had revealed a very high level of support for a new measure, coupled with a range of conflicting viewpoints on how best to achieve this. The working group had initially explored feasible additional mechanisms for capturing different types of self-evaluations of outcomes from HE, in ways that are amenable to quantitative analysis. Our outline proposals were as follows:

- The application of a skills framework could help us understand the extent to which graduates are deploying learned skills at work (or whatever path they are following), and would add the voice of graduates to the debate about the skills (or perhaps attributes or competencies) required for graduates to thrive. This would also contribute a significant source of information to debate and research about the skills requirements of jobs and employers.

- The use of a widely-adopted subjective wellbeing framework would help us understand and demonstrate the extent to which HE has a positive impact on attitudes, sense of worthwhileness and satisfaction with life, comparable to other segments of the population. We might also look at other related areas, such as social and cultural capital, autonomy, self-actualisation or resilience.

- Net Promoter Score (NPS) which measures loyalty, offering a proxy for satisfaction as well as having predictive power around the potential for growth. We are all familiar with being asked this question (“would you recommend...”) in market research contexts. It is an approach commonly used in commercial benchmarking and is starting to be used in HE.

- A link back to previous surveys or activity which could offer the chance to observe change in self-perceptions, goals, capabilities or attitudes over time, measured in consistent ways.

- A new self-evaluative question seeking to measure outcomes from the graduate’s viewpoint and according to their own success criteria.
SUBJECTIVE WELLBEING

We also sought alternative proposals. We published our reflections on the responses to this question in the *synthesis of responses* to the first consultation which demonstrated substantial support in principle, but fragmented views on how to proceed. As with other national surveys (e.g. the Labour Force Survey and Annual Population Survey), it is timely to consider adding wellbeing-related questions to Graduate Outcomes, to support policymaking and decision-making that take wellbeing into account.

The model we developed synthesised a great number of interweaving viewpoints to realise a data source that would use data from a number of sources, including a centralised census survey, LEO data and HESA’s Student record, as well as the possibility of using other sources if appropriate. We also reflected extensively on the literature published as a result of the ONS’ project to develop measures of subjective wellbeing.

Some of the ideas for alternative measures of graduate success were eventually adopted as optional banks of questions, for example the Net Promoter question, which is a well-defined evaluative tool widely used in industry and of which we discovered increasing use in the HE sector.

At the request of HESA’s statutory customers, the ONS’ Subjective Wellbeing question set, which was one of the proposed options for capturing graduate outcomes, and which had already been deployed successfully in the final iteration of LDLHE, was made part of the core Graduate Outcomes survey. This question set had been tested extensively and offers a measure of affect by gathering the respondent’s subjective experience of wellbeing “yesterday”.

However, users sought a measure of wellbeing that connected the respondent’s current situation with their experience of HE. Since respondents to our consultation had given a mixed response to the straightforwardly evaluative Net Promoter question, and the ‘hedonic’ Subjective Wellbeing set; while offering a wealth of viewpoints and commentary, we determined that a set of questions that sought to capture a ‘eudemonic’ measure of worthwhileness was also required.

We did not utilise the fifth ONS subjective wellbeing question “Overall, to what extent do you feel that the things you do in your life are worthwhile?” This question was considered too general and did not connect directly to the domain of life that includes experience of HE.

Development effort was therefore focused on synthesising a question set that reflected the needs of stakeholders to capture qualitative reflection by graduates responding to the survey on their outcomes so far. In doing so, we reflected on the following matters:

- Higher education is intended to develop skills and attributes that contribute to both instrumental measures of success and human flourishing. Measuring HE’s contribution to perceptions of this was deemed a priority. This was especially the case since the idea of utilising a skills matrix approach (point one above) was deemed unwieldy, expensive and unworkable.
- The Taylor review had revealed the importance of work in both giving purpose and meaning, and also as a source of rewards across a range of value measures. Our working hypothesis was that developing and utilising intellect,
mastery of knowledge and skills, and self-knowledge were all promoted by HE, and we might therefore expect good outcomes from HE to be correlated with better scores on a measure of "good work".

• Research shows that 'eudemonic' measures of wellbeing correlate with self-acceptance and environmental mastery: characteristics that HE is instrumental in developing. Furthermore, since higher education is associated with life-wide benefits (in employability, health, etc.) that can support positive outcomes over the lifecourse (and since there is evidence of appreciation of the value of HE increasing with the time from graduation) we wanted a measure that recognised the longer-term impacts expected of HE and so sought to quantify progress toward the graduate's own future goals.

We could not identify an existing model for gathering data of this kind and so HESA undertook to develop a proposal question set that would synthesise and serve the variety of needs expressed by stakeholders. We are grateful to the many individuals who supported us in this creative reflection, too numerous to mention. The new 'graduate voice' measures we developed are intended to capture the attributes of 'eudemonic' wellbeing relevant to graduates from HE in three dimensions:

• Meaningfulness or importance of the activity to the graduate.
• Skills utilisation.
• The graduate’s progress towards future goals.

The three core questions are asked of all graduates and there are versions tailored for those in work, further study, or doing something else. These questions were cognitively tested and received a very positive response, as well as some advice for refinement, which was taken on board. Details of them are available in the Graduate Outcomes Survey Results coding manual.

QUALITATIVE SELF-ASSESSMENT

Consultation respondents wanted to understand the link between qualitative self-assessments of outcomes with factors like salary, location, job role, and degree class. This could play a role in better evaluating the impact of careers education and personal development (whether separate or embedded in the curriculum). By deploying versions of these questions to all graduates, no matter what their current activity is, the Graduate Outcomes survey will also allow us to gather deeper insights into graduates pursuing non-traditional career paths, such as those developing creative portfolios or setting up a business.

It will also help us understand more about the experiences of graduates who are not engaged in economic work, for instance who are travelling or who have caring responsibilities. The questions we developed received a positive response in the second consultation. These questions will provide a richer picture of the diversity of graduate outcomes and will help redefine how we understand graduate success.

The NewDLHE review comprised a strategic and a working group, with defined terms of reference and membership.

Decisions made by the governance structure for the project were subject to the normal relationship management and governance processes of HESA and were ultimately approved by HESA’s Board.

View the NewDLHE review terms of reference and membership as well as agendas, papers, and notes of meetings for both the Strategic Group and Working Group.

The model we developed and consulted on included a proposed approach to governance which would involve the establishment of a Steering Group with responsibility to:

- Ensure the right questions are being asked.
- Keep the methodology under review.
- Ensure graduates are not being over-surveyed.
- Help ensure standards are being met, for example by advising on quality assurance of coding activities.

A Terms of Reference for the Graduate Outcomes Steering Group were developed during the design phase, and many members of the review group were asked to serve on this new group, to provide continuity of expertise.

METHODOLOGY STATEMENT PART TWO

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