



# CONSULTATION ON PRINCIPLES AND FUTURE REQUIREMENTS FOR THE UK'S PUBLIC INTEREST DATA ABOUT GRADUATES

In support of the Higher Education Statistics Agency's fundamental review of destinations and outcomes data for graduates from Higher Education

May 2016

***#NewDLHE***

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# INTRODUCTION

We serve a public purpose in seeking to understand the impact of Higher Education (HE) on graduates, on society and on the economy. Information that helps us understand the impact of HE is vital to support the collective and personal investments we make. Reliable data on graduate outcomes also supports our HE providers to fulfil their diverse missions.

This document is a consultation about the data that is collected across the UK about what happens to graduates after they finish study. We are interested in hearing the views of students, HE providers, employers, professional bodies and societies and others about their perceptions of what information will be needed in future. The Higher Education Statistics Agency (HESA) currently collects information through the Destinations of Leavers from Higher Education (DLHE) census survey six months after graduation, and in a smaller sample survey three years later. The DLHE survey is also used widely throughout the Further Education sector, where it is often a requirement of a funding body. This consultation will therefore also result in changes that will affect many FE institutions delivering HE. This consultation and the review it supports, will lead to the replacement of those surveys, by building the case for a new generation of data product that meets our anticipated needs for the foreseeable future. Stakeholders with an interest in graduate outcomes are requested to use this consultation as an opportunity to re-consider the fundamental requirements for national data on graduate outcomes.

What information will we need to gather about post-study outcomes for those leaving higher education in future? How can we pursue new and more efficient ways of delivering better quality data for students and all those who support their studies? The graduate jobs market has changed substantially in the last 15 years: further change is inevitable and its pace will be rapid, driven by automation and changing expectations. Universities have adapted to support students in meeting the challenges they face, with differentiated and increasingly sophisticated approaches. However, data collection on employment and other life outcomes following higher education has not changed substantially since 2002. All stakeholders will benefit from developing a plan to collect better data at lower cost. Four themes for a future replacement for the DLHE survey have emerged from the initial work of this review:

## 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.

**Fit 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, and supporting developing government purposes for destinations and outcomes data, across the UK.

We invite all interested parties to explore with us the desirable characteristics for a future replacement for the DLHE survey. Through this first consultation we aim to identify the features of a data product that will support the aims of a wide range of uses and users. We also want to gauge support for some of the ideas we present as tentative proposals. Later on there will be a time for sifting, analysing and refining ideas to produce a deliverable data product, and a further consultation around that. At this stage, we want 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.



*Paul Clark*

**PAUL CLARK**  
Chief Executive

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# TIMESCALES FOR RESPONSES

This consultation document was released publicly on 11 May 2016. The consultation period runs until **23:59 on Thursday 14 July 2016**. Please respond to the formal consultation by using the online facility at <https://hesa.onlinesurveys.ac.uk/newdlhe>

We are pleased to engage with other communications on an informal and formative basis, but *only those responses submitted using the online facility will be recognised as formal submissions to the consultation* for the purposes of detailed analysis.

Respondents are requested to leave questions they do not intend to answer blank, to aid our analysis.

The online survey software will allow you to securely save your partially-completed response, and to download a copy of your submitted responses for future reference, so please take this opportunity.

If you have questions about the process, please contact us using: [NewDLHE@hesa.ac.uk](mailto:NewDLHE@hesa.ac.uk)

## TERMINOLOGY

This is a consultation about a survey. For clarity we are using some terms as part of a controlled vocabulary (see **Table 1**).

**Table 1 Terminology used in this consultation**

Term	Meaning
<b>Data product</b>	A future replacement for DLHE could take a novel form, compiling data from a survey (or surveys) with linked data from other sources. We therefore use the term ' <b>Data product</b> ' in a generic way, to refer to a data collection vehicle or vehicles, or the dataset resulting from such activity, or a specific use of that dataset.
<b>Graduate</b>	Not every leaver from HE is a graduate. However, since the majority of students do graduate from a degree, we include in the term ' <b>Graduate</b> ' all leavers from HE who will form part of the population covered by a Destinations and Outcomes <b>Data Product</b> .
<b>Respondent</b>	We use this term to indicate you or your organisation. We <i>never</i> use this term to mean 'a <b>Graduate</b> responding to a <b>Survey</b> '.
<b>Survey</b>	This is always used in the sense of a data collection tool for surveying <b>Graduates</b> , and <i>never</i> in the sense of this consultation.

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# APPROACH

This is a first-stage consultation aimed at eliciting general views and overall levels of support for some high level principles, and to gather feedback on a range of tentative proposals.

We also hope it will support wide-ranging debate – please use the hashtag **#NewDLHE** online.

In some cases we ask questions that will aid us in gauging overall opinion, using yes/no questions or Likert scales. In other cases we encourage free-form responses. Please answer any questions on which you have an opinion. If you do not intend to answer a question, please leave it blank.

The survey is divided into two sections:

## SECTION A – PRINCIPLES AND AIMS

Section A of the consultation deals with high-level matters – in this section we present and request an executive-level view on the direction of travel for the review. Section A concentrates on principles that we should adopt to guide the review. Section A also considers what should be the high-level features of a future data product – what critical success factors should it achieve?

This section will help us identify the broad views of both the HE sector and the main users of the data, and will assist us in validating and shaping the strategic direction for the review.

## SECTION B – DISCUSSION AND DETAIL

Section B of the consultation is subsidiary to Section A. It takes a closer look at some of the issues the review is investigating, and is comprised of several chapters. It presents a range of discussion points, and some tentative proposals for comment and feedback. It is also intended to promote wider understanding and debate.

Proposals presented in this section are speculative, and they are (necessarily) based on working assumptions and hypotheses. Their relevance is of course contingent on fitting with the outcomes from Section A of the consultation. We do not expect every proposal to make it into the final design, but we want to

- offer feasible options to prompt reactions – a ‘straw man’ approach
- offer some depth and flavour to this consultation, to support debate
- represent some of the detailed work we have had to do to understand the complex issues involved

Engagement at the level of detail will support the creation of a more finely-tuned data product. In all cases we will take into account respondents’ views, which will help us reject, refine and prioritise these proposals.

# BACKGROUND

Higher Education providers have been collecting data on the destinations of graduates on a systematic basis for as long as anyone can remember. During the initial work of the review, we have encountered structured data (on paper) dating to the late 19<sup>th</sup> and early 20<sup>th</sup> centuries. The DLHE as we know it today grew from these origins.

DLHE data on student and graduate employability and destinations of leavers from HE are now being scrutinized more closely by a wider range of users than in the past. Course-level information on graduate employment is made available to applicants and their advisers, through Unistats. Many Higher Education providers use destinations measures as key performance indicators. Policymakers and sector bodies use destinations data as evidence to support policy on higher education, regional development and support for businesses<sup>1</sup>. Government announcements clarify ambitions ‘for more data to be made available’<sup>2</sup> to support student choice, curriculum design and quality assessment. Consideration of the data necessary to support these aims, is therefore timely.

2015’s Small Business, Enterprise and Employment (SBEE) Act permits the linking of HE student data to national tax and welfare records, for the purpose of educational evaluation, across the UK. The data will enable ‘a much richer ... understanding of social mobility’<sup>3</sup>, ‘[b]roaden the range of information available to parents and students’ and enable government to ‘distinguish universities that are delivering durable labour market outcomes and a strong enterprise ethos for their students.’<sup>4</sup> The Act also aims to ‘secure a comprehensive accountability system and better informed interventions and policies.’ The implications of the Act must be understood and taken into account, alongside initiatives that may in part depend upon it, such as the proposed Teaching Excellence Framework in England.

Higher education providers currently obtain data on the destinations of all graduates six months after they leave university, through the Destination of Leavers from Higher Education (DLHE) survey, the results of which are collected and published by HESA. Data has also been collected biennially on a sample of the DLHE population, a further three years later, through HESA’s centrally-co-ordinated Longitudinal DLHE survey. In addition, the DLHE survey is conducted for HE in FE provision where a funding body requires it, and there are also parallel surveys of new entrants to the teaching and medical professions, conducted by other national-level bodies. HESA also collects data on graduate start-ups and collaboration between universities and businesses in the HE Business and Community Interaction survey. This data is supplemented by research projects undertaken by a range of government, higher education and other bodies with a public purpose.

Survey delivery and data-linking technology and capabilities have improved, and offer the prospect of permitting methodological improvements that will improve data quality, while reducing the substantial costs of data acquisition. We should also take this opportunity to tackle duplication (in particular workforce areas) which is costly and does not serve the interests of graduates.

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<sup>1</sup> Universities UK, (2010); HEFCE, (2011)

<sup>2</sup> Johnson, (2015)

<sup>3</sup> A recent study published by the IFS has demonstrated the potential of these data. See Britton, J., Dearden, L., Shephard, N., & Vignoles, A. (2016).

<sup>4</sup> BIS, (2014)

Changing graduate employment prospects are an important aspect of 'significant changes to the shape and composition of the economy and labour market over the past quarter of a century'.<sup>5</sup> Research indicates the development of an 'hourglass-shape' labour market<sup>6</sup> where there is growth in high-skill and low-skill roles, while middle-level roles decline. While there is evidence of a growing disparity between the earnings of graduates in graduate and non-graduate jobs, the overall proportion of jobs requiring graduate skills has increased, as has the proportion of graduates in the labour market.<sup>7</sup> Despite the decline in the relative wage advantage of graduates, 'a degree continues to confer a significant earnings advantage'.<sup>8</sup> Studies show that graduates boost economic productivity to the extent that businesses will increase their demand for graduate skills, with two million more jobs requiring higher-level skills by 2022.<sup>9</sup>

The labour market is predicted to change further and faster. A recent government report identifies four potential future scenarios, each of which predicts increased labour market volatility.<sup>10</sup> The NUS also sees the present and future as characterised by anxiety around 'wider labour market challenges, education reform, the employability of young people, guidance and choices for education and careers.'<sup>11</sup> The Higher Education sector continues to adapt to the changing expectations and needs of students and society, for example by 'embedding enterprise into courses'<sup>12</sup>, partnering with business<sup>13</sup> and creating innovative schemes aimed at boosting employability.<sup>14</sup> These adaptations signal a requirement to think more broadly about the kinds of outcomes and destinations that graduates now have, and the measures that we will require to understand them.

Much of the research that has been conducted on the graduate labour market has relied on the DLHE's rich data source. The DLHE is significant because it is largely responsible for how we construct our collective understanding of the graduate labour market, and of graduate prospects more generally. The structure of the DLHE reflects what we believe it is important to know about graduates, and in a fundamental way, constructs our perceptions. Historically there has been a focus on a small number of indicators to denote the value of HE in relation to the labour market (salary, type of graduate job). Over the past decades changes in the economy and wider society has seen growth and change in the role that HE plays in supporting individuals to contribute and thrive. We have a wider range of challenges for students, HE providers and policy makers around access, social mobility, and social inclusion. We need to ensure the data we capture reflects these wider societal changes and our collective changing interests.

This review offers an opportunity to address future requirements for data, and to improve the methodology for obtaining it in ways that offer better value for money.

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<sup>5</sup> Skills Commission, (2014)

<sup>6</sup> Hackett *et al.*, (2012)

<sup>7</sup> Green & Henseke, (2014. pp. 2, 31-32)

<sup>8</sup> Purcell, K., Elias, P., *et al*, (2013. p.61)

<sup>9</sup> Universities UK, (2015). pp.5-6; Universities UK, (2014a. pp. 27-28)

<sup>10</sup> UKCES, (2014)

<sup>11</sup> NUS, (2015)

<sup>12</sup> Riordan, (2013)

<sup>13</sup> Lincoln, (2011); Universities UK, (2014b)

<sup>14</sup> Huddersfield, (2014); Maguire, (2014)

# RESPONDENT INFORMATION

We anticipate a large number of responses to this consultation. We require some information about you or your organisation to help us analyse the responses. If you are responding on behalf of an organisation, please co-ordinate to ensure that you only submit a single organisational response.

1.	Name of Organisation	<input type="text"/>
2.	Is this response on behalf of? (please choose the category that fits best)	
	<input type="checkbox"/> A Higher Education provider	
	<input type="checkbox"/> A Further Education provider delivering HE level courses	
	<input type="checkbox"/> A HE sector body	
	<input type="checkbox"/> A professional, statutory or regulatory body	
	<input type="checkbox"/> A government body	
	<input type="checkbox"/> A student representative organisation	
	<input type="checkbox"/> An employer or employer organisation / A private individual)	
3.	Name of contact person for queries	<input type="text"/>
4.	Email address of contact person for queries	<input type="text"/>
5.	Telephone number of contact person for queries	<input type="text"/>

## HOW WE WILL USE YOUR INFORMATION

Responses to this survey will be used to support the Higher Education Statistics Agency's fundamental review of destinations and outcomes data for graduates from Higher Education, and they will be used in analysis, documentation and communications in connection with that activity. Wherever practicable, responses will be used in aggregate form or otherwise anonymised. Responses may be shared with HESA's statutory customers for the purpose of developing HESA's data collections. Responses will be retained in the longer term to enable HESA to monitor and improve its processes.

# SECTION A

## PRINCIPLES AND AIMS

National requirements for data on graduate outcomes and destinations have not been reviewed at a fundamental level since the turn of the millennium. Changes in the graduate jobs market, new and expanding uses for the data, new technology, a changing legislative framework and the need to operate efficiently, all support the argument that a review of these data is timely.

This section covers the principles, approach and high-level requirements for the future of data collection.

### DATA LINKING: ITS BENEFITS AND LIMITATIONS

Our review has been evaluating the potential for linked data to take the place of some aspects of independent data collection.

Data linking involves the bringing-together of separate datasets using common identifiers or matching processes. Linked data brings a number of benefits. It can reduce the cost of data acquisition, while increasing data quality (by using the most appropriate or credible dataset) and enhancing analytical potential, simultaneously. While these advantages are considerable, linked data requires careful consideration of other issues: access to data must be negotiated through an appropriate legal mechanism. Ownership and control of the data source rests elsewhere, so there must be confidence that the data source is well-governed, appropriately accessible, and likely to meet needs over the period for which they will be required – trust and confidence must be established between the data controllers.

One potential source of linked data is HMRC tax data and DWP benefit data, which are now available to the government for the purposes of education evaluation. A recent report published by the IFS gave a flavour of the power of these data<sup>15</sup>. However, there are other potential sources of linked data, too. For instance, the HESA Student record contains information about further study – enough to populate the basic, factual question asked in the DLHE survey.

At a high level, there are three basic models that could be pursued:

- 1) We could **rely entirely on linked data** to determine graduate outcomes. This would remove the need for a survey, and reduce costs, but we would miss-out on a substantial amount of valued information, like location, industry, job title, type of work and reasons for taking the job. We would need to negotiate an appropriate level of access for legitimate education evaluation purposes in the HE sector, but would have no contextualising data sources for the period following study.
- 2) We could choose not to utilise linked data, and **continue** collecting data (including salary) by consent **as at present**. This would ensure that the HE sector continues to have access to its own source of graduate information. However, since the government has already indicated that it will utilise linked data, this strategy would likely prove expensive and we would run the risk of similar but not directly comparable data sources on salary in the public domain.
- 3) We could take a **mixed approach**, collecting data from the best available data sources, whether surveys of graduates like DLHE or national datasets, and merge them to produce a composite source of information. Collaboration between government and the HE sector would be required to deliver a dataset (and appropriate arrangements for access) that meets the wide range of education evaluation purposes that both government and HE providers routinely undertake. This would likely give the best value for money and explanatory power of the available approaches.

<sup>15</sup> Britton, J., Dearden, L., Shephard, N., & Vignoles, A. (2016).

Without a survey, linked data alone would leave salary information from the HMRC as the only empirical basis for judging graduate outcomes. This data could be analysed with respect to any data in the HESA Student record, so we could, for instance, look at sex, ethnicity, disability and subject of study as determinants of salary outcomes by HE provider. We could also use data linking to discover some facts about further study.

Relying on data linking alone would, however, leave very substantial gaps in information. We would be unable to understand whether a salary relates to the economy in the region where the graduate studied, their home region, or another area, which they have migrated to. We would also lose an important source of information about graduate entrepreneurship, since some of these students do not feature in national tax and benefits data for legitimate reasons. We would have no, or limited information about the types work that graduates are doing – neither the roles and activities they are undertaking, nor their hours and contractual basis. Our knowledge of the industrial sector they are working in would be curtailed. Our ability to link to other survey information about careers in teaching or in the NHS would also be diminished. We would know nothing about the outcomes for students who are beyond the reach of the HMRC or DWP (for instance, students working overseas). We would also lose the opportunity to gather qualitative views such as the ‘main’ activity being undertaken, or on how the graduate believes their HE experience has helped them prepare for later activity.

The purpose of a survey would therefore be to gather data necessary to understand in more depth the outcomes of HE study, the wider impacts of HE, and to support the provision of information. This entails that the survey gathers information that cannot be sourced more appropriately elsewhere, and that the quantity and quality of the information are sufficient to draw conclusions from. When used alongside other data sources, the survey data must be robust enough to add explanatory power, and permit data to be contextualised.

Any future survey to replace the DLHE/Longitudinal DLHE must deliver statistically valid information. In the case of the likely uses to which DLHE data is currently put, this means delivering sufficient useable data at subject or course level by HE provider. For both DLHE and NSS, this involves attaining high overall response rates, and we are currently investigating the precise parameters for this. High response rates lead to greater precision in publication, which can be advantageous to differentiate adequately between different course offerings – but come at a financial cost greater than higher-level results.

- |    |  |                              |                             |
|----|--|------------------------------|-----------------------------|
| 6. | Do you agree that linked data can provide a critical part of the data product? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 7. | Do we need a survey?   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 8. | Does a survey need to be universal (a census of graduates)?                    | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 9. | Further comments   |                              |                             |

## WHICH DATA SHOULD BE COLLECTED?

Any survey or surveys resulting from this review will collect information for which the graduate is currently the best available source. As with the current DLHE, this will include some basic factual information, and some experiential or qualitative-type information.

HE has a wide range of outcomes that relate to many individual experiences, of which employment-related ones are only a sub-set. Economic indicators are easily counted, but other important areas of benefit and value are of growing importance and could be susceptible to measurement, and so we have concentrated our resources on exploring this area<sup>16</sup>.

### HIGH-LEVEL TOPICS

At present, data collection (in the DLHE and Longitudinal DLHE) gathers information on the following main topic areas:

- **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 accessed). This section accounts for the majority of the survey. The Standard Industrial Classification of the employer and Standard Occupational Classification of the role is derived from this section.
- **Further study** (what is being studied, where and how funded).
- Questions that identify graduates working in **regulated professions** (for linking purposes).
- Questions about the HE experience and **preparedness** for future activity.

The review has re-examined these, and so far has not heard any strong case that these areas are not of interest or should be abandoned. Our working hypothesis is therefore that these areas appear to remain valid and relevant for the range of legitimate purposes to which the data is put. However, we have discovered a range of areas where the *approach* taken to gathering these data needs to be updated and refreshed. For instance, graduate entrepreneurship is currently treated in a fairly cursory way – its profile could be lifted. Also, questions about motivations for employment could be made applicable to a wider range of activities, including entrepreneurship and further study. These and a variety of other potential changes are discussed in greater detail in Section B of this consultation.

One area that where we perceive an emerging new requirement for data, is around the measures that exist explicitly to understand graduate outcomes. At the moment, the principal mechanisms for this are the salary (which is collected directly), the proportion of graduates that have attained positive destinations (a judgement based on the proportion in work or further study) and the SOC-code<sup>17</sup> of any employment role (a classification of the hierarchical 'level' of role attained, derived through a process of manual coding). Thus, the current data permit only a narrow range of imposed judgements to be made. Given the changes in the graduate jobs market, and also in the expectations and priorities of students, there is a *prima facie* case for introducing additional measures that seek to capture outcomes from HE in additional new ways. This would enable the notion of a 'positive outcome' to be described in more nuanced or multifaceted ways, and would provide a data source to advance the (now rather desultory) debate about what constitutes a 'graduate job'. We explore these issues in the next section.

<sup>16</sup> The review has commissioned two pieces of independent research: the first gathering richer student views to inform the debate, and a second analysing the literature around value from HE.

<sup>17</sup> See the Office for National Statistics website for details of the standard occupational classification (SOC) <https://www.ons.gov.uk/methodology/classificationsandstandards/standardoccupationalclassificationsoc/soc2010> The coding frame used in DLHE is SOCDLHE2010, which is an extended version of the SOC2010 coding frame owned by ONS. SOCDLHE2010 incorporates a fifth digit (on top of SOC2010's four digits) to incorporate additional detail necessary to understand the roles being undertaken by graduates, which frequently are in 'new economy' roles that were not envisaged at the time SOC2010 was put together. We would ideally like to see SOC2010 updated to encompass the areas of graduate employment that SOCDLHE2010 seeks to fix, and hence to have a single national coding frame suitable for graduate destinations information. SOCDLHE2010 was created by Peter Elias (now retired) of the University of Warwick's Institute for Employment Research (IER). Peter also created ONS' SOC2010 coding frame, which is subject to periodic revision to maintain its currency. An update (to either or both coding frames) is currently due and a suitable contractor will need to be found.

## MEASURING GRADUATE OUTCOMES

Graduates are arguably the best judges of the success of their outcomes and destination following a HE experience. The current DLHE does not provide any mechanism to capture self-evaluation by graduates. We posit that this omission should be corrected, to widen the representation of successful outcomes from HE beyond the two main indicators currently in use: the standard occupational classification (SOC code) (for further detail, see p.37) and salary (for further detail, see p.38).

What kinds of measurements are appropriate? Whatever measures we choose, they are likely to become fundamental to public understanding of graduate outcomes: a combination of open-mindedness and great care are required. A key purpose of this consultation is to stimulate debate around what measures will have lasting value, and to determine what information about graduate outcomes will have the greatest value to society. What will we want to know about the impact that HE has on individual lives and experiences? How do we recognise the way that the impact of HE unfolds over time, and what needs to be done to understand that journey?

To start the debate, our review has undertaken some initial exploration of several feasible additional mechanisms for capturing different types of self-evaluations of outcomes from HE, in ways that are amenable to quantitative analysis. Data such as these could have the effect of widening the range of indicators available for use in public information products, and potentially enable the different student support strategies followed by HE providers, to be surfaced more effectively than at present. The sample areas we have investigated so far include:

- **The application of a skills framework** – this 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. (See p.43 and p.34 for further background)
- **The use of a widely-adopted subjective wellbeing framework** – this 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. (See p.32 for background)
- **The Net Promoter score** – which measures loyalty, and hence offers 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 already starting to be used in HE. (See p.28 for background)
- **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.
- **Something else...** We want to understand the types of information that would be most meaningful to you – please tell us about what you see as important.

Each of these methods potentially offers new insight into outcomes in ways that incorporate the qualitative characteristics of self-evaluation. They would support more nuanced understanding of the debate about the graduate outcomes from HE than current data. They would each enable a broader range of characteristics to appear in public information products. They all broaden the potential range of evaluations of the outcomes of HE, and are amenable to quantitative analysis. They may also act as ‘reaction papers’ that will help respondents frame their own views. We explore these issues in more depth within Section B.

We understand the great care that is required in developing these qualitative metrics, and would welcome comments about the general approach to inform a suitably cautious approach in this area.

10.	Do you agree with the high-level scope of topics?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
11.	Do you agree with the principle that it is desirable to find appropriate additional ways of measuring graduate outcomes	<input type="checkbox"/> Yes	<input type="checkbox"/> No
12.	Is there anything we have missed?	<input type="text"/>	
13.	Further comments	<input type="text"/>	

## HOW SHOULD DATA COLLECTION RELATE TO POST-GRADUATION PATHWAYS?

Current national data collection takes place at six months after finishing a course, which captures first destinations for all students (the DLHE survey). A stratified sample of students is then surveyed at 36 months (the Longitudinal DLHE). The format of the 6-month survey has been in place for many years, reflecting the longstanding interest that HE providers have in understanding what graduates do next after study. The Longitudinal DLHE is funded by a range of national bodies, to understand longer-term effects and outcomes from HE. Its smaller sample size makes the data most usable at national, regional or subject level only.

The current 6-month timing of the DLHE survey reflects both the interest in the first destinations of students, and a practical compromise between timescale and the availability of sufficient accurate contact details for graduates. The timing of the early DLHE is long-standing, and arguably reflects an expectation of a transition to a stable outcome indicative of long-term trajectory during that time period. In the past this may have been the norm, but as a larger proportion of the population now study at HE levels, and as both transitions from HE and expectations change, there is a case for re-examining the timescale for data collection.

The initial work of the review has also revealed a strong and growing appetite for longitudinal data, or rich data only available from a longer timescale than six months. Evidence from the current Longitudinal DLHE shows that we can expect to gather a more in-depth set of data on employment and further study destinations if the timescale for the survey were to be changed to a later point following the end of studies.

If the census date for the survey were to change to a later point, it could be desirable to gather some information about employment history. There are many options for this, depending on data users' requirements. One source for this would be extrapolation from linked data (this would be limited in scope). Another could be a first destinations survey as part of a suite of related surveys.

There is probably no 'right' point in time, but advantages and disadvantages in each case. We present a variety of possible dates in order to gather feedback. We are keen to understand more about the impact of a change in census date on data requirements.

Advantages of retaining an earlier survey point are that first destinations remain of interest, and also that there has long been an interplay between information-gathering and careers service support – in fact this interaction was the genesis of the current DLHE. There are also practical considerations, firstly that contact details held by the HE provider are more likely to be up-to-date, the closer the survey is to the end of studies, and secondly that the timing of the survey originally reflected available capacity in institutions to undertake the work involved.

There are also strong arguments for later survey points. A later survey would enable a more complete picture of early years following graduation to be understood, including periods of experimentation and strategic portfolio-building. In order for a later survey point to work, we would need to be assured of a high response rate, in order that statistically valid conclusions can be drawn at a granular level (say, for subjects by HE provider).

One option could be to replace the current two-survey approach, with a census survey at a mid-point between the current DLHE and LDLHE – at 18 months, for instance. This could be close enough to the end of studies to capture first destination information accurately, while giving a longer view on post study activities for a larger sample of graduates. A survey of this sort would be capable of adding contextual information to tax and benefits data, and permit much richer data sources for research, analysis and public information.

## A national example

In a data product such as Unistats, where courses can be compared, data to support salary comparisons (see **Figure 1**) could potentially be derived from HMRC data, in future.

Salary information 		
Average salary six months after the course	£20,000 	£27,000
Typical salary range	£18,000 - £25,000 	£22,000 - £28,000
<b>Average salary across the UK after taking a similar course</b>		
after six months	£24,000 	£24,000
(salary range)	£19,000 - £28,000 	£19,000 - £28,000
after 40 months	£30,000 	£30,000
(salary range)	£24,000 - £39,000 	£24,000 - £38,000

**Figure 1** A typical course comparison on Unistats

However, a different data source would need to be used to derive data on the type of occupation that graduates are in (see **Figure 2**), probably a survey of graduates. The level of complete data available for this purpose would be different to a HMRC source used to derive salary. While high response rates are always desirable, new standards will need to be **put in place for when data becomes usable in a variety of contexts and levels of granularity.**

Employment six months after the course		
In a professional or managerial job	70% 	80%
Not in a professional or managerial job	30% 	20%
In an unknown job type	0% 	0%

**Figure 2** SOC data from DLHE represented in a Unistats course comparison

## RESPONSE RATES AND NON-CENSUS APPROACHES TO SURVEYING

High response rates to the DLHE are currently essential for the wide range of purposes to which the resulting data are put. The requirement for high response rates has led to a survey methodology that delivers them. This has led, for instance, to third-party-provided data playing a role in the collection.

One of the opportunities presented by linked data, is the attainment of very high levels of completeness within the defined coverage. This offers the prospect of creating a powerful data product, even before any accompanying survey has been completed.

While survey data could be used to contextualise linked data, it is clearly not possible to ensure that a survey response is obtained for each individual for whom there is linked data. Therefore, an approach that combines different data sources with different levels of completeness, will be required.

We have therefore also considered the possibility of utilising other approaches to surveying, such as a 'cohort' approach, where a sample is identified and followed over time; a 'wave' approach, where there is a rolling coverage that covers a proportion of the overall population, or a sample approach. These approaches have the advantage of being relatively inexpensive compared to a census, and for some national-level uses this approach would be adequate. However, for individual HE providers or more granular uses of the data at national level, these approaches are sorely limited, and unlikely to deliver the data that users require.

This raises the question of what level of complete survey responses will be required for which end uses. For instance, one HE provider choosing to benchmark employment rates of graduates from initial teacher training courses across the HE sector may be satisfied with extrapolating from responses from 50% of the target population (adjusting for bias), whereas another HE provider that seeks to understand variations in employment outcomes for students of its various business studies courses, will require responses from perhaps 75% or 80% of the target population.

Our understanding of the likely use-cases for the data indicate that a census of graduates is probably the most desirable method. We will investigate what levels of completeness will be required to deliver statistically significant conclusions, once the range of use cases becomes clearer, following this consultation. We therefore encourage all respondents to complete the section on onward uses of data (p.60 onwards) to help us understand current usage of destinations and outcomes data, and desired future uses.

14. Do you think a single survey point can work?  Yes  No
15. If a single survey were to be used, when should this take place?  
 6 months  12 months  18 months  24 months  36 months  48 months  Other
16. If multiple surveys, which points would be most appropriate?  
 6 months  12 months  18 months  24 months  36 months  48 months  Other
17. Further comments and explanations for your answers

## PRESENTATION AND FINANCING

One of the review's motivations is to reduce the cost of data collection. A related issue has been to look at the benefits of centralisation of the survey process.

### COST AND VALUE

We aim to produce a future product that offers good value for money. The current DLHE survey has never been fully costed, and so this activity must be undertaken in order for us to bear down on costs. We request consultation respondents at HE providers to assist us in developing a national costing for the current DLHE, to act as a baseline for any future survey. This is a one-off costing activity, which will require input from finance offices and DLHE co-ordination staff: full details of the approach are given in the section entitled "Establishing the current cost base of DLHE" (p.55).

Responses to this section of the consultation will also be instrumental in delimiting the scope of the final data product.

### A CENTRALISED SURVEY

One method for increasing efficiency would be to benefit from the economies of scale available through centralising the survey. Centralisation also increases the consistency of the data, by ensuring an identical set of quality assurance processes are applied during initial gathering of the data, as well as during the national collection. All users and suppliers of data benefit from improvements to the assurance processes. The review is also considering whether a change to the presentation of the survey from a distributed method to a centralised method (either through a national contract, or an Agency) would serve to increase trust in and reliance on destinations and outcomes data.

Data derived from DLHE is now used in a range of public information products, including league tables and Unistats. We therefore wish to investigate perceptions of the objectivity of the data, in order to ensure continued trust in its reliability. The impartiality of data in the DLHE is currently guaranteed through the following means: training of staff, a detailed published methodology, data quality checks, a Code of Practice for Data Collection<sup>18</sup>, and a system of audit by the Funding Councils. This approach is strong, but could be improved. We also wish to gather views on the importance of consistency in application of the methodology. We intend to ensure that the methodology applied to any future data collection remains appropriately aligned with the intended uses of the data, in line with the Principles and Protocols of the Code of Practice for Official Statistics<sup>19</sup>.

Arguments in favour of retaining a distributed approach include the alignment of graduate support activities with data collection; the longstanding interest that HE providers have had in gathering these data; and the flexibility to apply the methodology in ways suitable for the profile and expectations of the survey population.

Arguments in favour of a centralised approach include an improved consistency in application of the methodology for data collection and post-collection-coding of data<sup>20</sup>; the potential for reduced costs through efficiencies and national procurement; enhanced independence of the data-gathering process; enhanced perceptions of the integrity of the data; reduced costs of audit; reduced operational burdens; and decoupling data collection from graduate support processes.

<sup>18</sup> Higher Education Statistics Agency, 2015 (see <https://www.hesa.ac.uk/code-of-practice-for-higher-education-data-collections>)

<sup>19</sup> UK Statistics Authority, 2009 (see [https://www.statisticsauthority.gov.uk/wp-content/uploads/2015/12/images-codeofpracticeforofficialstatisticsjanuary2009\\_tcm97-25306.pdf](https://www.statisticsauthority.gov.uk/wp-content/uploads/2015/12/images-codeofpracticeforofficialstatisticsjanuary2009_tcm97-25306.pdf))

<sup>20</sup> HEPs undertake a range of manual data coding activities post-collection. Further study is coded to the JACS subject coding frame. Coding of the Standard Industrial Classification of the graduate's job is undertaken by an organisation contracted and managed by HESA. Graduate responses to the DLHE questions about job title and what the job mainly entails are manually coded by staff at HEPs. The coding frame is SOCDLHE2010 (see footnote 17)

A centralised survey could be coupled with a flexible approach that enables extra questions to be added to the end of the survey, to enable HE providers to retain one of the principle advantages of a distributed survey. It is also possible that a centralised approach to SOC-coding (see footnote 20) could be adopted, while retaining a distributed approach to surveying. The activity of SOC-coding is amenable to (partial) automation, and we are keen to investigate the savings and data quality benefits that can be obtained through a more systematic approach.

18.	Do you currently outsource your DLHE data collection process? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No, but we used to <input type="checkbox"/> No, but we plan to
19.	Do you think a central survey would provide more demonstrably robust results? <input type="checkbox"/> Yes <input type="checkbox"/> No
20.	What concerns would there be about a central survey? <input type="text"/>
21.	What drawbacks might there be in centralising and/or automating SOC-coding, and what weight should they be given? <input type="text"/>
22.	Please tell us here about any other comments you wish to make in response to this section <input type="text"/>

## SECTION B

# DISCUSSION AND DETAIL

The current DLHE survey produces one of the most heavily-used datasets held by HESA, and usage is increasing year-on-year. We have therefore drawn inspiration from the existing DLHE survey, and a variety of other sources, to offer tentative, outline proposals about the kinds of data that could appear in a replacement data product.

As far as possible, we have sought to remain open-minded about the kinds of data required, and in some cases we have abandoned the notion of a tentative proposal in favour of a more speculative and discursive approach. However, where we believe there is likely to be an ongoing requirement for data, or the current questions in DLHE seem work well, we indicate this view.

We began the review by assuming that a survey would not necessarily be required. We also did not have a clear view on the potential scope for data linking, if any. However, throughout the review's work so far, three underlying issues have become clear:

- First, the possibilities opened-up by data-linking are powerful, and could play a significant role in driving-up the completeness, consistency and timeliness of data on graduate outcomes and destinations, while driving down the costs of acquisition.
- Second, that the HE sector benefits from owning a data source that meets its diverse purposes, independent of government. Replacing a sector-owned data process with a government-controlled one requires careful consideration.
- Third, that data linking on its own is unlikely to meet the requirements of students, policymakers and other data users and additional, contextualising data will be needed. Some form of survey activity will probably be required to provide this.

We have therefore proceeded with the working hypothesis that a mixture of survey and linked data will be a feature of any future data product to replace DLHE.

Following the close of the consultation, we will analyse the responses and produce a synopsis that will be published on the consultation website.

We will then begin the process of designing a potential replacement for the DLHE, and this will be the subject of a further consultation, in the autumn.

Following that further consultation, a business case will be produced for the replacement of DLHE, and an implementation plan developed before the end of 2016, which will see the DLHE replaced with a new data product over the following two years<sup>21</sup>.

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<sup>21</sup> This is an approximation, as the bringing-together of several data sources and the design of outputs may mean that some parts of the data product can be implemented ahead of others, whereas any decisions to change survey dates may have the opposite effect of lengthening timescales.

# CHAPTER 1

## GENERAL DATA REQUIREMENTS

While the DLHE and Longitudinal DLHE surveys are associated with graduate employment-related information (we dedicate a whole chapter to employment matters, later on), they also capture information about further study, and other experiences following higher education. In this chapter, we look at the range of data that seek to capture the broader post-HE experience, beyond employment, and introduce some ideas about future possibilities for data acquisition.

### WHAT ACTIVITIES ARE GRADUATES ENGAGING IN, AND WHICH ARE THE MOST IMPORTANT TO THEM?

Data users need to know what activities graduates are engaging in, and of these, which one is the most important: this seems to represent a settled data requirement. Linked data from Her Majesty's Revenue and Customs (HMRC), the Department of Work and Pensions (DWP), and education datasets including HESA's (but also FE datasets, to allow for non-linear progression) could provide important background information. However, some activities in the current DLHE survey cover areas where data are not available for linking (due to start a job, travelling, something else). These data have no source other than the graduate. The 'main' activity is a qualitative question, also with the graduate as its only source.

We therefore need to obtain this information at the most granular level and in the most reliable way – from the graduate.

<b>Q1</b> On 12 January 2016 will you be...?	All activities you will be doing	Most important (select only one)
Working <b>full-time</b> (including self-employed/freelance, voluntary or other unpaid work, developing a professional portfolio/creative practice or on an internship/placement)	<input type="checkbox"/>	<input type="radio"/> (1)
Working <b>part-time</b> (including self-employed/freelance, voluntary or other unpaid work, developing a professional portfolio/creative practice or on an internship/placement)	<input type="checkbox"/>	<input type="radio"/> (2)
Due to start a job in the next month	<input type="checkbox"/>	<input type="radio"/> (4)
Engaged in <b>full-time</b> further study, training or research	<input type="checkbox"/>	<input type="radio"/> (5)
Engaged in <b>part-time</b> further study, training or research	<input type="checkbox"/>	<input type="radio"/> (6)
Taking time out in order to travel	<input type="checkbox"/>	<input type="radio"/> (7)
Unemployed	<input type="checkbox"/>	<input type="radio"/> (9)
Doing something else (e.g. retired, looking after home or family)	<input type="checkbox"/>	<input type="radio"/> (8)

Figure 3 Question one in the current DLHE survey, on activities of graduates

The current DLHE question in this area (**Figure 3**) has been given careful consideration by previous reviews, and we believe it remains broadly fit for purpose. However, the review's initial work has indicated that this question could be improved. Some amendments should therefore be explored, such as adding items like 'Working more than one job' and 'Starting my own business', and possibly examples of non-economic work such as 'Volunteering' or 'On an internship'. Some of these activities are represented elsewhere in the current DLHE (in the section on "Employment basis") and would benefit from being relocated to this first question, where they would fit better. These activities are not only interesting in their own right, but could serve a practical purpose of allowing 'routing' of a survey to explore these areas in more depth, if required.

23.	Do you support the proposal for continued collection of data on activities and main activity?	<input type="checkbox"/> Yes	<input type="checkbox"/> No			
24.	Do you agree with adding examples of additional types of work here?	<input type="checkbox"/> Yes	<input type="checkbox"/> No			
25.	Please indicate your level of support for the following additions:					
	Working more than one job	<input type="checkbox"/> Very low	<input type="checkbox"/> Low	<input type="checkbox"/> Moderate	<input type="checkbox"/> High	<input type="checkbox"/> Very high
	Starting my own business	<input type="checkbox"/> Very low	<input type="checkbox"/> Low	<input type="checkbox"/> Moderate	<input type="checkbox"/> High	<input type="checkbox"/> Very high
	Volunteering	<input type="checkbox"/> Very low	<input type="checkbox"/> Low	<input type="checkbox"/> Moderate	<input type="checkbox"/> High	<input type="checkbox"/> Very high
	On an internship	<input type="checkbox"/> Very low	<input type="checkbox"/> Low	<input type="checkbox"/> Moderate	<input type="checkbox"/> High	<input type="checkbox"/> Very high
	Other (please specify)	<div style="border: 1px solid black; height: 40px; width: 100%;"></div>				

The current DLHE covers non-employment activities relatively superficially, and we are keen to understand the appetite for changing this.

26.	Please offer any general comments or observations	<div style="border: 1px solid black; height: 40px; width: 100%;"></div>
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## FURTHER STUDY, TRAINING AND RESEARCH

There is significant interest in returners to study, and at present this interest is satisfied through five questions on the DLHE survey. While the graduate is the current source for these data, in future, linking to HESA and other education datasets creates the possibility of deriving much of this factual information without a survey being required.

### SECTION D Your further study, training or research

If you will be undertaking any further study or training or will be registered as a research student on 12 January 2016, please continue with this section. If not please go to SECTION E.

For the following questions, please provide details of what you consider will be your MAIN study, training or research. Your main study, training or research might be the one you will spend the most time doing, or the one which is related to your future plans.

**Q25** Which of the following best describes the type of qualification you will be aiming for?

Higher degree, mainly by research (e.g. PhD, DPhil, MPhil) <input type="radio"/> (01)	First degree (e.g. BA, BSc, MBChB, MEng) <input type="radio"/> (04)
Higher degree, mainly by taught course (e.g. MA, MSc, MBA) <input type="radio"/> (02)	Other diploma or certificate <input type="radio"/> (05)
Postgraduate diploma or certificate (including PGCE) <input type="radio"/> (03)	Other qualification <input type="radio"/> (07)
Professional qualification (e.g. ACA, Chartered Institute of Marketing) <input type="radio"/> (06)	Not aiming for a formal qualification <input type="radio"/> (08)

**Q26** What is the name of the course you will be registered on (e.g. MSc in Interactive Media)?

Official use only JACS code:

**Q27** What subject will you be studying, training in or researching?

**Q28** What is the name of the university or college at which you will be registered?

Official use only UCPROV code:

**Q29** How will you be mainly funding your study, training or research?

Self-funding (e.g. savings/loans/employment) <input type="radio"/> (01)	Sponsorship <input type="radio"/> (03)
Grant or award (e.g. Research Council Studentship, bursary(s)) <input type="radio"/> (02)	Other <input type="radio"/> (05)
My employer provided financial support (e.g. course fees, provision of study leave) <input type="radio"/> (04)	

**Figure 4 Further study questions in the current DLHE**

For example, Questions 25 through 29 in the current DLHE (see **Figure 4**) could be removed from a survey, instead gathered by linking back to current HESA data (as each value is available within the current HESA Student record). We do not yet know how viable it would be to answer similar questions from FE datasets, to account for non-linear progression. We would like to gauge the general level of support for a future approach of deriving basic data about further study from existing education data, and to receive comments about how it could best be implemented. We also recognise that for a data-linking-led approach to have value, detailed data would need to be shared between HE providers. We tackle this issue in more detail in the “Legal matters: sharing data” section on page 60.

This potentially-powerful data-linking opens the question of whether questions about further study could be removed from the survey entirely. An alternative to this would be to ask higher-value questions about motivations for study, in order to better understand student plans. For instance, a question that asked the student to comment on all the different reasons for study, and then to pick the main one, would be a valuable source of information for a wide range of uses and users. A question of this kind would need careful design to ensure neutrality and avoid a possible vulnerability to *post-hoc* rationalization. We would welcome comments on this issue, and particularly welcome views on the categorization of motivations for further study.

27. Please indicate your level of support for the outline proposal to derive basic further study information from linked education data sources

Very low  Low  Moderate  High  Very high

a. Please explain your answer

28. Please indicate your level of support for the collection of data about graduate motivations for further study

Very low  Low  Moderate  High  Very high

a. Please explain your answer. We would be especially grateful for suggestions for 'categories' of motivation.

## PERSONAL IDENTIFIERS, CONTACT INFORMATION, AND OPT-OUT DATA

We must collect data sufficient to uniquely identify the graduate, contact the graduate, and link to other data. This will obviously be required at individual level, and is a necessity for successful responses.

Institutional records will normally be required to make first contact. HESA will maintain pre-existing opt-out information.

We need to allow for an appropriate range of further uses for the data, when drafting the opt-out statement.

The graduate will always be needed to update these records as no other source is definitive.

29. Please share any comments you wish to make about these basic data.

## OVERALL HE EXPERIENCE

The current DLHE survey contains some questions about overall HE experience (**Figure 3**).

### SECTION E Your overall higher education experience

These questions refer to how well prepared you feel for the following, regardless of what activity you are currently undertaking. Please consider how well prepared you feel by your recent course, which includes any extra-curricular activities you were involved in (including placements undertaken while you were studying).

**How well did your recent course...**

**Q30 Prepare you for employment?**

Very well	Well	Not very well	Not at all	Can't tell
<input type="radio"/> (1)	<input type="radio"/> (2)	<input type="radio"/> (3)	<input type="radio"/> (4)	<input type="radio"/> (5)

**Q31 Prepare you for further study?**

Very well	Well	Not very well	Not at all	Can't tell
<input type="radio"/> (1)	<input type="radio"/> (2)	<input type="radio"/> (3)	<input type="radio"/> (4)	<input type="radio"/> (5)

**Q32 Prepare you for being self-employed/freelance or for starting up your own business?**

Very well	Well	Not very well	Not at all	Can't tell
<input type="radio"/> (1)	<input type="radio"/> (2)	<input type="radio"/> (3)	<input type="radio"/> (4)	<input type="radio"/> (5)

**Figure 5 Current DLHE questions on overall HE experience**

While tackling an important set of questions around skills and preparedness, this section of the DLHE survey has been criticised for asking hypothetical questions of graduates who will, in the main, have only theoretical knowledge of post-study paths they have not taken. Moreover, the data produced by these questions are not amenable to consideration against the intended learning aims of a course, since these do not currently exist as structured data at national level. To elucidate, a vocational course in Nursing, say, may perhaps not be intended to cover entrepreneurship in any meaningful way. Therefore, asking a nurse the questions shown in **Figure 5** (p.27) will likely yield answers that might be predicted from the course aims. Conversely, if the question yields answers that are not predictable from the course aims, more questions are raised than are answered.

We argue that these questions should therefore be replaced with a set of questions around skills development and use in the workplace (p.43 and p.33) and graduate enterprise/entrepreneurship (p.36).

Alternatively, these questions might retain value if graduates were asked only the question from **Figure 5** that applies to their present situation – but this is not part of the working proposal. We would like to gauge the general level of support for a proposal to remove these questions.

30. Please indicate your level of agreement with the working proposal that 'overall HE experience' questions should be discontinued

Very low  Low  Moderate  High  Very high

31. Please share any further comments you wish to make about overall HE experience questions

# CHAPTER 2

## ALTERNATIVE MEASURES OF GRADUATE OUTCOMES

Below, we present some initial work by the review, by way of initial options that could be worthy of further exploration.

### STUDENT ENGAGEMENT

The HE Academy have piloted the UK Engagement Survey. Engagement is often regarded as a significant leading indicator for good academic outcomes. Evidence from universities that track this, including through graduation surveys, find that very highly satisfied students/graduates often engaged fully with provision offered by their university, developed employability skills alongside academic qualifications and have chosen for a variety of reasons to be where they are at the point of the current DLHE survey. Might engagement prove to have other post-study benefits? We welcome comments on the value of either linking back to UKES data, or asking engagement-related questions in a future replacement for DLHE.

32. Please indicate your level of support for the development of an approach to measuring outcomes of graduates based on student engagement data
- Very low    Low    Moderate    High    Very high
33. Please share any comments you wish to make about linking to or using student engagement data or survey questions as part of a data product measuring student destinations and outcomes

### NET PROMOTER SCORE

Based on the work of Frederick Reichheld, the Net Promoter Score (NPS) provides answers to many of the deficiencies of traditional customer surveys. Reichheld makes the case that these failed to predict growth, and were often viewed as overly complex, with too many questions. As a result, they tended to be administered less frequently, and the outcomes were difficult to use to produce action. Benchmarking proved difficult, and occurred rarely in practice.

Reichheld developed one simple measure to predict growth based on *loyalty* rather than *satisfaction*:

*“The percentage of customers who were enthusiastic enough to refer a friend or colleague – perhaps the strongest sign of customer loyalty – correlates directly with differences in growth rates among competitors” (Reichheld 2011<sup>22</sup>)*



Figure 6 A pictorial exposition of the questions used to derive the NPS, and to offer context to it.

### HOW IS NET PROMOTER CALCULATED?



Net promoter score = % of promoters minus % of Detractors

Figure 7 Scoring classification for NPS

A simple worked example of net promoter score will therefore work as follows, in a sample of surveys where, in answer to the question “On a scale of 0 to 10 how likely are you to recommend us to a friend or a colleague?” 40% of responses answer 9 or 10, 30% answer 7 or 8, and 30% answer from 0 to 6. (see Figure 8.)



Figure 8 NPS: a simple worked example

<sup>22</sup> See Reichheld, F., & Markey, R. (2011).

The Net Promoter Score is a highly-visible and widely-trusted method, with a wide-range of corporate adopters, and cross-industry applicability.

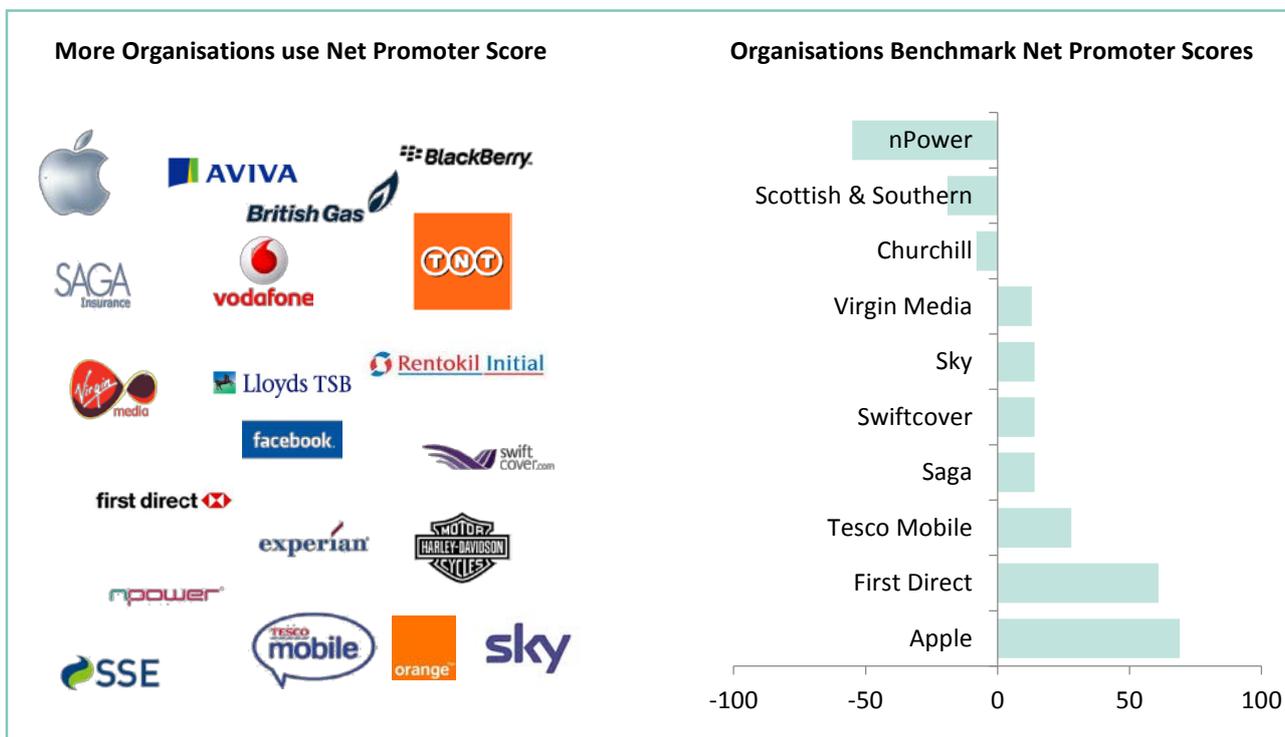


Figure 9 Some users of the Net Promoter Score, and a demonstration of NPS' amenability to benchmarking

### NPS IN HE

Net Promoter is already in use in higher education, and preliminary results are promising (YouthSight, 2013). It can be used at multiple points in time, from entrance into HE onwards. The underlying reasons for the score can be explored and coded from the responses to the follow-up free-text question, and offers valuable insights to support institutional processes around quality, provision and marketing.

HE already demonstrates high levels of satisfaction, through mechanisms such as the National Student Survey, the iGraduate survey, and the Postgraduate Taught and Research Experience Surveys. NPS is likely to reflect this largely positive state of affairs, but also offer added insights for benchmarking and enhancement. The measure also enables students to have their say, on their own terms:

*“When customers act as references, they do more than indicate that they’ve received good economic value from a company; they put their own reputations on the line, and they will risk their own reputations only if they feel intense loyalty”. (Reichheld, 2011)*

Furthermore, Reichheld (2011) notes that in a mature market “the only path to profitable growth may lie in a company’s ability to get its loyal customers to become, in effect, its marketing department”. Given the considerable maturity of the HE sector, and the existing strength of HE alumni networks, this point was not lost on the review group.

Advantages of the NPS include:

- One question, deployable with minimal cost. An additional free-text question could offer added value and insight, but would not be immediately amenable to quantitative analysis.
- Simple and transparent
- Can be administered at multiple points, on entry, at graduation, as well as afterwards
- Produces actionable results
- Offers benchmarking capability, potentially at a range of levels
- Acts as a stimulus to improvement processes

There are also reasons for caution, too. If NPS were to be deployed, it would likely assume a high level of importance and widespread exposure.

34.	Please indicate your level of support for the inclusion of a Net Promoter question in a survey of graduates <input type="checkbox"/> Very low <input type="checkbox"/> Low <input type="checkbox"/> Moderate <input type="checkbox"/> High <input type="checkbox"/> Very high
35.	What precise wording of the question would you favour? <input type="text"/>
36.	Please explain your answers <input type="text"/>
37.	Do you have any further comments to make about the Net Promoter Score? <input type="text"/>

## SUBJECTIVE WELLBEING

*We are indebted to the work of Dr. Glen Crust the University of St. Mark and St. John, on whose work the following section relies extensively.*

Subjective well-being (SWB) is a new and increasingly influential<sup>23</sup> measure of life quality that complements objective well-being indicators such as life expectancy, level of education attainment and household income<sup>24</sup>. SWB is measured and reported annually by ONS using indicators for Personal Wellbeing<sup>25</sup> and social capital<sup>26</sup>.

In a pilot study, SWB data was collected from 5,300 Plymouth University and University of Huddersfield graduates as a supplement to the 2011/12 and 2012/13 DLHE surveys, using the four ONS Personal Wellbeing items and a European Social Survey Social Trust item. These items are:

*On a scale of zero to ten...*

1. *Overall, how SATISFIED are you with your life nowadays?*
2. *Overall, to what extent do you feel the things you do in your life are WORTHWHILE?*
3. *Overall, how HAPPY did you feel yesterday?*
4. *Overall, how ANXIOUS did you feel yesterday?*
5. *Generally speaking, would you say that most people can be TRUSTED, or that you can't be too careful in dealing with people?*

More information is available in the case study (box out). Other HE providers have told us that they have investigated SWB as a part of their general approach to student support.

## IMPROVING THE STUDENT EXPERIENCE USING THE DLHE / SWB PILOT STUDY DATA

Pilot study SWB data at Plymouth and Huddersfield highlighted gaps in the student experience which led to the development of SWB interventions. Interest is an essential determinant of self-directed action<sup>27</sup>. Many students are more interested in the prospect of fulfilment, satisfaction, excitement, happiness, and friendship today, than in working towards graduate-level employment in three years' time. **Curriculum-based employability interventions** promoted extracurricular life as an opportunity for students to find out by trial and error what feels personally **worthwhile** to them. Attitudes that emerge in **worthwhile** activity (such as curiosity, initiative, risk taking, ingenuity, resilience and drive for results) eclipse skills as determinants of early career performance<sup>28</sup>. Established personality indicators<sup>29</sup> and values assessments<sup>30</sup> were used to increase students' self-aware autonomy<sup>31</sup>, **social capital**, **trust** and collaboration, by developing positive attitudes to individual difference. Significantly lower graduate SWB scores for some ethnic groups provide an incentive to (1). examine whether students from all cultural traditions and social classes are enabled to participate fully in university life<sup>32</sup>, and (2). introduce electronic collection of Students Union societies participation data.

**Student performance interventions** were implemented. Students engaged in **worthwhile** extracurricular activities are more motivated to improve their performance<sup>33</sup>. Students reviewed SWB scores associated with recent social activities and examined what one thing they could do to improve their score for the following weekend. Spreadsheet-based in-class SWB data collection and visualisation led into reviews of activities such as seminars and students' use of coursework feedback,

<sup>23</sup> Support for SWB from a broader range of UK government, economic, education and health experts for the introduction of subjective wellbeing outcome measures in HESA's higher education outcome survey is collated in Crust (2016).

<sup>24</sup> For an overview of the history of wellbeing measures, see Allin, P., & Hand, D. J. (2016).

<sup>25</sup> (ONS, 2012)

<sup>26</sup> (Sieglar, 2015)

<sup>27</sup> (Weinstein, et al. 2012)

<sup>28</sup> (Murphy, 2012)

<sup>29</sup> (Briggs Myers and Myers, 1980)

<sup>30</sup> (Schwartz, 2012)

<sup>31</sup> (Burchardt, et al. 2013)

<sup>32</sup> (Stevenson, 2012)

<sup>33</sup> (Patrick et al, 2012)

academic support services and commercial productivity tools (such as Covey's 7 Habits, Tuckman's team stages *etc.*) as means to improve students' life-wide **satisfaction**.

**Up-stream scalable student anxiety and autonomy interventions** were developed and implemented. **Anxiety** and hopelessness impede learning in HE<sup>34</sup>. Students explored whether they preferred activities to be challenging and **worthwhile**, or **happy** and pointless<sup>35</sup> and compared challenge- and threat-responses to stress. Students examined evidence that pre-performance arousal improves productivity<sup>36</sup> while it is *the belief that anxiety is harmful* rather than **anxiety** itself that impedes performance and harms health<sup>37</sup>. The course evaluation reported these interventions helped students develop experimental lives.

Students explored autonomy<sup>38</sup>, hope<sup>39</sup> and the role of friends, old-timers<sup>40</sup> and advisers in finding ways to achieve blocked goals and extend their performance development toolkits. Students examined DLHE Q14 / SWB data describing graduates' main reasons for taking their job. The **worthwhile** and **satisfied** scores for *job fitted my plans, job was well paid, and only job offer I received* illustrate life-wide employability, life quality and salary income benefits associated with more autonomous, self-aware, values-based occupational choice<sup>41</sup>. SWB is a tool for intensifying conditions which support the emergence of clubs, societies and less conspicuous self-directing collaborations in campus communities. **Happiness** promotes experimental occupational choice<sup>42</sup>. A practical working knowledge of values<sup>43</sup>, personality<sup>44</sup> and stress<sup>45</sup> promotes students' identification of **worthwhile** objectives<sup>46</sup>, performance in **satisfying** roles<sup>47</sup> and a positive view of individual difference. SWB supports productive values-based goal-oriented collaboration.

## WHAT BENEFITS MIGHT BE ATTAINED FROM ROLLING-OUT SWB QUESTIONS NATIONALLY?

An example comparison between Computer Science graduates and Education Studies graduates, from the pilot study, shows the latter record higher **worthwhile** and **satisfied** scores but lower graduate salaries. SWB therefore offers a measure that complements graduate employment outcome data (such as salary and SOC-code of job) and extends HE providers' reputation for improving life-wide, life-long life quality - in addition to standard of living. Higher Education already builds the habits of self-directed lives that feel **worthwhile**, **satisfying**, **happy** and **socially connected**. Graduates with these habits relish challenge and experience little uninvited **anxiety** while earning respectable salaries, productively doing what they love, in effective authentic styles, with like-motivated colleagues. Measuring SWB will extend the capacity of UK HEPs to deliver and evidence wellbeing and employability outcomes for UK and international students.

Since SWB questions are also used in a wide range of other settings, data from graduates could also offer a data source that will enable comparisons to be made between graduates and other populations.

38. Please indicate your level of support for the development of an approach based around measuring subjective wellbeing in a future survey of graduates

Very low  Low  Moderate  High  Very high

39. Do you have any further comments to make about Subjective Wellbeing?

<sup>34</sup> (Williams et al., 2015)

<sup>35</sup> (Baumeister et al., 2013)

<sup>36</sup> (Brooks, 2012)

<sup>37</sup> (McGonigal, 2015)

<sup>38</sup> (Burchardt et al, 2013; Weinstein et al, 2012)

<sup>39</sup> (Day et al, 2010; Snyder, 2011)

<sup>40</sup> (Wenger, 1998)

<sup>41</sup> (Crust and Hicks, 2015)

<sup>42</sup> (Holland et al, 2012)

<sup>43</sup> (e.g. Schwartz, 2012)

<sup>44</sup> (e.g. Briggs Myers and Myers, 1980)

<sup>45</sup> (McGonigal, 2015)

<sup>46</sup> (Ryff and Singer, 2008)

<sup>47</sup> (Hirsh et al., 2003)

## ATTRIBUTES AND SKILLS FOR LIFE

While SWB offers a particular paradigm, there are other connected areas that the review has not yet touched. These include measures of other attributes where we might expect HE to demonstrate an impact, such as in the development of social or cultural capital, in promoting individual autonomy, developing the capacity for self-actualisation and inculcating resilience.

There is a rich literature around skills and attributes, including how they are differentiated (or not) from each other.

In terms of skills, in the following chapter on data about employment, we cover the measurement of skills in some detail (p.43). As an extension of the set of employment-based skills-focussed questions we posit in that section, it is possible to conceive of a more general measure of the extent to which skills developed through higher education are being utilised in life. This could be achieved by adapting the presentation of the set of skills questions to cover activities other than employment, including entrepreneurial activities, unemployment and further study.

Alternatively a single simple question about the extent to which skills learned at university are being used in life could be amenable to scoring in a similar way to employment-focussed skills.

40. Please indicate your level of support for the development of a measure of attribute or skills usage, outside of a direct employment context, in a future survey

Very low  Low  Moderate  High  Very high

41. Please share any further comments you wish to make about measuring attributes or skills usage

## LINKS BACK TO PREVIOUS SURVEYS OR ACTIVITIES

One suggestion the review group has heard is that an explicit link back to previous survey questions would allow for improved analysis of outcomes. Many HE providers appear to routinely survey new entrants, which if a general approach across the HE sector, provides a potential basis for comparison before and after the course. Another approach that was suggested to the review group, was linking back to the NSS. We also reflect that the growing interest in Learning Gain could result in instruments that are amenable to useful reflections by graduates.

By employing links back to previous activities or surveys such as those mentioned above, we could potentially discover to what extent perceptions of preparedness, confidence and satisfaction have changed following study. However, there are disadvantages including the requirement to synchronise surveys across the student lifecycle, and the interdependencies and burden that are introduced thereby.

42. Please indicate your level of support for the development of a synchronised approach between a replacement for DLHE, and earlier surveys or activities

Very low  Low  Moderate  High  Very high

43. Does your organisation survey students at the start of their courses?  Yes  No

44. Please share any further comments you wish to make about linking back to previous surveys

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## OTHER SELF-ASSESSMENT POSSIBILITIES

We have captured a selection of possible usable frameworks in the discussion above – but we do not pretend that the list is exhaustive. There may be merit in a general satisfaction or outcome measure that seeks to answer to what extent the graduate is happy or satisfied with their current situation. There might also be measures such as social capital gain, that could be designed. We also recognize that the answers given to questions such as these will be impacted by the timescales for a survey, covered in Section A of this consultation. We welcome any advice or comments on alternative measurements or mechanisms that respondents believe would have value.

45. Please share any suggestions or comments you wish to make about alternative measures of outcomes

# CHAPTER 3

## DATA REQUIREMENTS – EMPLOYMENT

Questions relating to graduate employment form the majority of the current DLHE and DLHE longitudinal questionnaires. The data that results from these questions is among the most heavily analysed and used in the HESA datasets. In this third chapter on data requirements, we focus on employment-related data, alone.

### GRADUATE ENTERPRISE

We have already covered graduate enterprise superficially in the section on “What activities are graduates engaging in, and which are the most important to them?” (p.23). We now seek to explore this in more detail. There is wide-ranging interest in the characteristics of graduate entrepreneurship. This is an area where linked data is unlikely to assist our understanding, as early-stage graduate entrepreneurs may not be represented (or fully represented) in either tax or welfare records, for a variety of legitimate and predictable reasons.

Areas of particular interest are the industry of the start-up, and the source of funding behind it. There may be interest in gathering other business information, like the web address, or any linkable business information (companies house number, for instance).

We recognise that a certain amount of detail is already captured through the HE Business and Community Interaction survey, and we particularly welcome comments about where the balance between that survey and information sought through a survey of graduates, should be.

In practical terms, by using an online tool, questions about graduate entrepreneurship could be ‘routed’ from appropriate answers to the question on “What activities are graduates engaging in, and which are the most important to them?” (see page 23).

We welcome comments on this overall approach, and suggestions that help delimit the scope of these data.

46. Please indicate your level of support for the inclusion of questions focussing on graduate entrepreneurship, in a future survey

Very low  Low  Moderate  High  Very high

47. Please share any further comments you wish to make about data on graduate entrepreneurship

## JOB TITLE, MAIN THING DONE IN JOB, AND STANDARD OCCUPATIONAL CLASSIFICATION CODE

Job title and details of the main things done in the job are collected from the graduate through the DLHE survey. Standard Occupational Classifications (SOC) data are not collected directly, but coded by the staff or contractors of HE providers, on the basis of information on job title, and the main things done in the job.

These data are all still required by a wide range of data users, and are important enough to be required at individual level. It is not believed that these data will be available from HMRC, since the collection mechanism is the P45 form (only available on leaving a job) and in any case this only holds the job title (and not the main things done in the job), which will prove inadequate for the purposes of SOC-coding. Nor can we derive this information from, say, SIC data, because industry-level data does not let us see whether, say, a computer science graduate working at Marks & Spencer is working in the IT team or on the tills; or if her coursemate is working for JPMorgan as a trader or a programmer.

While we are exploring a basket of other indicators about outcomes from HE (more on which below), SOC provides an important basis for comparing graduate data with other labour market data, along with a certain amount of continuity with previous data.

*The Office for National Statistics (ONS) is currently reviewing SOC2010, on which the SOCDLHE2010 coding frame is based. We believe that in the longer term, the SOC framework requires updating to account for changes in the jobs market, which are particularly important when considering graduates from HE. We also believe that the classifications of certain roles should be moved into different major groups. There may also be benefit in severing the link between the codes themselves and the hierarchical way in which they are presented, to enable the coding framework to benefit from greater flexibility in the face of a rapidly-changing labour market. HESA has responded to the ONS' consultation to this effect and we look forward to continuing a productive discussion about developing the SOC coding frame during the life of the review.*

48. Please share any comments you wish to make about Job title, main thing done in the job, or the SOC-coding frame or process

## EMPLOYER DETAILS AND STANDARD INDUSTRIAL CLASSIFICATION

Details of a graduate's employer are required to understand the industry in which a graduate is working, and are used to assign a Standard Industrial Classification (SIC) code, something that is successfully and cost-effectively managed at national level by a HESA-appointed contractor, and could potentially continue in future.

It may be possible that some industrial classification data, or raw data that could be used to produce SIC, will be available from the HMRC. However, it is currently not clear whether this will be the case, and if such data are available, what their characteristics will be in terms of completeness, consistency and accuracy. Our working assumption has therefore been that employer details adequate for users' needs will not be available from HMRC, and we should therefore plan to continue to collect them (and SIC-code centrally from them) pending further information.

We have been advised that some areas of the SIC coding frame do not appear to capture a sufficient level of granularity for a range of service industry roles, particularly in finance and business services. We would be interested in hearing a wider range of views on this point, and advice on alternative approaches.

We believe that these data are also generally required by careers/employability services. In all cases data are required at an individualized level. We also perceive a desire to obtain more reference data about employers, by looking for indicators of business size/scale, and by determining the employment location (we will deal with this latter point below). There are various reference data information sources available for organization information, but none is considered sufficiently complete to be usable at present. However, we could investigate this more fully if data users would find it beneficial.

We are interested in learning more about the types of information about employers that data users require, to help inform the review.

49. Please indicate your level of support for continuing to collect employer information  
 Very low  Low  Moderate  High  Very high

50. Please indicate your level of support for removing employer details from the DLHE, if equivalent data were available from linked data, would you support removing employer details from the DLHE  
 Very low  Low  Moderate  High  Very high

51. Do you believe that the Standard Industrial Classification offers a sufficient level of detail for your purposes?  Yes  No

52. Would any additional data about employers (whether collected, linked, or sourced as reference data) add value for you? Please explain

53. Do you have any other comments or observations to share regarding employer information?

## SALARIES, EMPLOYMENT BASIS AND HOURS OF WORK FOR GRADUATES IN THE UK AND OVERSEAS

A set of interrelating questions in the DLHE and DLHE Longitudinal gather information about salary, hours of work and contract of employment, in order to produce a rich picture of the working lives of graduates. We currently collect salary information by consent for 50% of graduates in work.

This is a long-term settled requirement for data. We now have an opportunity to re-think how we collect data for graduates working in the UK: by utilising linked data and re-visiting what questions are required to contextualise it. For graduates working overseas there are different issues to contend with.

In the following four sub-sections we look at salary, contractual employment basis, hours, and overseas graduate issues, in turn.

### SALARY

In the current DLHE and Longitudinal DLHE, salary information is collected by consent from graduates and third parties (see *Figure 11*).

Tax and benefits data can now be linked with education data under the provisions of the Small Business, Employment and Enterprise (SBEE) Act. These data are collected using highly-regulated nationally-consistent forms and processes, and are quality assured by rigorous checks and extensive powers of audit. The Department of Business, Innovation and Skills are currently assessing these data, and have shown that it is possible to obtain a high level of record linking, and to derive salaries.

HMRC is a highly-credible source of high-quality data on earnings. These (subject to an appropriate level of access) could replace salary data currently gathered by consent through the DLHE survey. As a result we will not necessarily need to ask graduates any survey questions about salary in future. This change would remove one of the main causes of graduate drop-out from the survey as it is currently conducted. It would also make available a much more complete and consistent dataset that does not suffer from survey effects, such as imprecision. However, there are may be issues with comparability with previous DLHE data. This is in part because HMRC covers all earned income, whereas DLHE deals only with 'main' employment; in part because HMRC is a time-series while DLHE is a census; and in part because the consistent methodology of HMRC will increase the sample size while removing the idiosyncrasies of how individuals interpret and choose to answer questions about their salary. IT is too early to judge the scale of these effects, but it will be possible to assess this once sufficient overlapping historical DLHE and HMRC data are available. In a similar way, comparability with previous data would need to be considered carefully if survey timescales were also to change. Despite these issues, linked data offers the opportunity of reducing costs while enhancing data quality. **We therefore recommend that HMRC data be used as the main source of information about earnings, and that collection of salary data through the DLHE should cease as a consequence.**

While HMRC offers a powerful source for data, its use will be restricted to the terms of the SBEE Act. Please see the section entitled "Legal matters: sharing data", (p.60), for more questions related to requirements for onward use of these data. In carefully-defined circumstances, exchange of certain individual-level data could enhance the information available for legitimate public purposes, while reducing cost and increasing quality. It then becomes a matter of putting in place an enabling legal framework to arrange sharing of this information with the previous HE provider, whose DLHE population the graduate is in.

In other cases, there may be legitimate uses for the data, which would not require the transfer of individual-level data.

54. Would you, in principle, support the development of suitable legal arrangements for the sharing of linked data?  Yes  No

55. Further comments

56. Do you agree in principle that we should cease to seek salary data by consent for UK resident graduates, and that salaries should instead be derived from linked data?  Yes  No

57. Do you have any further comments to make about this proposal?

## EMPLOYMENT BASIS

In the current DLHE and DLHE Longitudinal surveys, we collect data about the contract of employment (see **Figure 10**). We also collect detailed information on hours of work and pay periods. These data are mainly used to contextualize salary data in various ways.

**Q5** Which of the following best describes the basis on which you will be employed on 12 January 2016?

Self-employed/freelance	<input type="radio"/> (01)	On an internship/placement	<input type="radio"/> (07)
Starting up own business	<input type="radio"/> (02)	Developing a professional portfolio/creative practice	<input type="radio"/> (08)
On a permanent or open-ended contract	<input type="radio"/> (03)	Temping (including supply teaching)	<input type="radio"/> (09)
On a fixed-term contract lasting 12 months or longer	<input type="radio"/> (04)	On a zero hours contract	<input type="radio"/> (11)
On a fixed-term contract lasting less than 12 months	<input type="radio"/> (05)	Other	<input type="radio"/> (10)
Voluntary work	<input type="radio"/> (06)		

**Figure 10** Employment basis as captured by the current DLHE survey

Contract type is useful to track different forms of employment and interaction with employers. We understand that these data will not be available from HMRC, but that some categories could be derived (for instance, self-employed people will, in general, be identifiable). Therefore, a survey of graduates remains the best source of data.

We have not detected an appetite for this question to be substantially altered, but some of the employment bases could arguably sit more naturally within the question about “What activities are graduates engaging in, and which are the most important to them?” (see p.23) particularly “Starting-up own business”, “Voluntary work”, “On an internship/placement” and “Developing a professional portfolio/creative practice”.

58. Please indicate to what level you agree that the data on employment basis should continue to be collected  
 Very low  Low  Moderate  High  Very high
59. Do you agree with the proposal that “Starting-up own business” should be removed from this question, to the question about ‘activity’?  Yes  No
60. Do you agree with the proposal that “Voluntary work” should be removed from this question, to the question about ‘activity’?  Yes  No
61. Do you agree with the proposal that “On an internship/placement” should be removed from this question, to the question about ‘activity’?  Yes  No
62. Do you agree with the proposal that “Developing a professional portfolio/creative practice” should be removed from this question, to the question about ‘activity’?  Yes  No
63. Do you have any further comments to make about the collection of employment basis data for graduates?

## HOURS OF WORK

The format of questions about hours of work in the current DLHE were introduced from the Longitudinal DLHE survey. These questions are mainly used to contextualise salary information. HMRC does not carry information about hours of work, so to obtain these data at an individualised level requires that the graduate be surveyed. While it is possible that in some cases, DWP data may indicate hours of work, this is unlikely to be the case in more than a small percentage of records.

The question order makes the current interrelationship between pay and hours clear (see **Figure 11**). The main purpose of these data is to allow a comparable hourly rate to be produced for all graduates.

<b>Q6</b>	What will your approximate gross pay be for your main employment, before tax?	<input type="text"/>	Unpaid work <input type="radio"/>
<b>Q7</b>	What payment period does the above figure refer to (Q6)?		
	Annually	<input type="radio"/> (1)	Hourly <input type="radio"/> (4)
	Monthly	<input type="radio"/> (2)	Other (e.g. fortnightly, zero hours contract, per project) <input type="radio"/> (5)
	Weekly	<input type="radio"/> (3)	
<b>Q8</b>	What currency will you be paid in?		
	Pounds sterling	<input type="radio"/> (1)	Other <input type="radio"/> (2)
<b>Q9</b>	Approximately how many hours a week will you be working for your main employment?	<input type="text"/>	
<b>Q10</b>	If this is not your only employment on 12 January 2016, what do you estimate your total earnings will be for a year to the nearest thousand (£) before tax?	<input type="text"/>	

**Figure 11** Current DLHE questions about pay and hours

However, feedback from HEPs has indicated problems with these questions. The questions take a relatively long time to answer, and potential differences between contracted hours, paid hours and worked hours have been highlighted by both graduates and HEPs. Arguably, if salary data is sourced from HMRC, our approach could be simplified. For instance, a simple question such as Q.9 (see **Figure 11**) asking “Approximately how many hours a week will you be working for your main employment?” could yield data of similar value to those currently collected. However, these data will still remain subject to the normal range of survey effects. An alternative might be to rely on a simple part-time/full-time split (as gathered in the question on “What activities are graduates engaging in, and which are the most important to them?”, p.23), rather than assuming an accurate average hourly wage can be derived. This simple full-time/part-time split might be sufficient for most purposes, and mean that the survey can be simplified.

64. Please indicate your level of support for retaining a question that asks: “Approximately how many hours a week will you be working for your main employment?”  
 Very low  Low  Moderate  High  Very high
65. Please indicate your level of support for removing any questions about hours of work (and relying only on part-time/full-time splits gathered elsewhere)  
 Very low  Low  Moderate  High  Very high
66. Please share any further comments you wish to make about the collection of hours of work data for graduates

## GRADUATES EMPLOYED OVERSEAS

For graduates living overseas, no linked data is available. Data currently collected for these graduates is difficult to analyse, as the salary data tend to be relatively incomplete, full detail about the currency of payment is not collected, and the different costs of living, and graduate labour markets overseas, make evaluation of responses complex. Despite these problems, we have also heard that the data are seen as valuable, particularly for those HE providers with significant overseas student populations. We would be interested in understanding more about the appetite for collection of salary data for graduates employed overseas. At the extremes, there are two basic options: either to cease collection of these data altogether; or alternatively to provide an enhanced online survey system that allows the exact currency and amount to be collected by consent for overseas students. There may be intermediate options between these two.

To contextualise salary for graduates employed overseas, hours of work would also need to be captured in some form. Arguably the approach taken by the current DLHE survey could be retained (subject to the changes posited in the section dealing with “Employer details and Standard Industrial Classification”, on p.38) of asking what pay period salary relates to (weekly, monthly, yearly) and asking for average weekly hours of work. An alternative to gathering hours could be to collect full-time/part-time employment only (through the question about “What activities are graduates engaging in, and which are the most important to them?”, p.23).

67.	Do you agree that we should continue to seek salary data by consent for graduates resident overseas?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
68.	If we were to continue collecting salary data by consent for graduates working overseas, would you prefer to see actual salary and currency of payment collected through an enhanced survey tool?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
69.	If we were to continue collecting salary data by consent for graduates working overseas, would you favour continuing to collect details of hours worked and payment periods?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
70.	Do you have any further comments to make about the collection of salary data for graduates resident overseas?	<input type="text"/>	

## LOCATION

Location of employment is important data to understand the structure of the graduate labour market on a city and regional basis. It underpins analysis of the contribution that HE providers and graduates make to regional economies and industries, such as ‘cold-spot’ analysis and understanding skills flows. It should be retained.

Because of the complexities of group structures, franchising and outsourcing, it is not expected that these data will be derivable from HMRC data, which may for instance show the location of head office rather than the location there work takes place. The graduate would therefore remain the main source of data. Data are generally required at an individual level for analysis, and are collected as town/city/region and/or postcode, or country if not in the UK.

Information on domicile location is not currently collected, but could be added if there was a requirement to understand graduate migration in greater depth, including the wider social impacts of graduates and travel to work patterns. The cost of collecting these new data would need careful justification.

There may be linked data options that could be explored to obtain additional depth and quality of information, while minimising the costs of data acquisition. This might include utilising a geospatial data system such as the Unique Property Reference Number<sup>48</sup> (UPRN) to derive contextual information about the location where a graduate is living or working.

71.	Please indicate your level of support for the continued collection of employment location information	<input type="checkbox"/> Very low	<input type="checkbox"/> Low	<input type="checkbox"/> Moderate	<input type="checkbox"/> High	<input type="checkbox"/> Very high
72.	Please indicate your level of support for the additional collection of domicile location information	<input type="checkbox"/> Very low	<input type="checkbox"/> Low	<input type="checkbox"/> Moderate	<input type="checkbox"/> High	<input type="checkbox"/> Very high
73.	Do you have any further comments to make about the collection of location information?	<input type="text"/>				

<sup>48</sup> To find out more about the publicly-owned and governed UPRN system, see: <https://www.geoplace.co.uk/addresses/uprn>

## SKILLS

There is a compelling case for introducing skills measures in a successor to DLHE. HE develops skills, and graduates use skills in the workplace and elsewhere. Skills are the main discourse through which employers express their graduate recruitment requirements. There is currently no national data product that looks at skills development and workplace usage for graduates. The creation of a data product that addresses this gap offers the opportunity to support more sophisticated dialogue between HE and industry around graduate preparedness. For this to occur, measures that aim to uncover the rate of skills matching will be required, in ways that are credible to HE and industry.

Whenever a case is to be made for metrics, a number of questions need to be addressed. They include:

- What are we going to measure?
- Why are we trying to measure it?
- What are we going to use to measure it?
- Who is going to use the measure (and what for)?
- What do we want the output of the measure to be?

During the work of the review so far, we have started to evaluate the opportunities for the inclusion of skills-based information in a future data product, and the exploration that follows answers the above questions.

The question of skills measurement is a complex one with a rich literature, not least because “skills” mean different things for different people. There have been many and continued attempts to conceptualise skills and competencies over time, and these keep changing. In this note we will not dwell on the question of ‘what is a skill’. A ‘skill’ is what we end up measuring/assessing with the method and data available and no method will be perfect. A good review of multiple ways of assessing skills can be found in Haahr *et al* (2005)<sup>49</sup>. Here we summarise relevant findings from that report, which is much wider than we need, and add recent advancements on skills assessment for the UK specifically, which have been many and rich.

### A PRACTICAL TAXONOMY OF SKILLS ASSESSMENTS

**Input/Output based** – assessments of skills based on qualifications are known as based on input as in knowledge acquired with the qualification. The person is assessed by what they have done in the past not by what they do or can do at present. Output based assessments of skills are based on what the person is doing in actual activities or what the person could do using testing (cognitive, psychometric...)

**Direct/Indirect** - direct assessments are drawn from the person in surveys (self- assessment/reporting) or using tests, as above, so that the skills used or possessed by the person can be observed directly. Indirect assessments attribute skills levels to job roles and the person is given the skill level of the job role they hold.

Haahr *et al* (2005) consider at length pros and cons of different types of assessment and whether some methods are better for some skills and less for others. In this section of the consultation document we just look at broad advantages and disadvantages, bearing in mind that a majority of existing assessments use mixed methods.

<sup>49</sup> Haahr, J. H., & Hansen, M. E. (2006)

## STUDIES OF SKILLS IN THE UK AND ELSEWHERE

Utilising the definitions offered in the box out, derived from Haahr *et al* (2005), we can conceive of the following measures that could be applied in a survey:

### Input and direct

These measures are relatively easy to obtain as per counts of qualifiers as reported by graduates. The jobs held by qualifiers of the same self-reported discipline (as finely defined as wanted – health management) are assumed to represent the skills of that discipline. Using these methods, we will always find that not all job holders will come from specific disciplines, e.g. only 80% of health management job holders have a health degree (IES for UKCES Working Futures<sup>50</sup>), which then implies that 20% have health management skills without having a degree that would be considered a health qualification. Still, this method is widely used, either by asking students what degree and what job they hold (DLHE), or by asking workers what level of education and degree they hold (LFS), or any combination of these. The recent paper from Universities UK, ‘Supply and Demand for Higher Level Skills’<sup>51</sup> contains a good overview and infographics on indicators based on input direct measures, such as qualifiers, DLHE and the Labour Force Survey (LFS).

### Input and indirect

These measurements include assessments of skills based on the earnings of graduates by discipline and level of education. Wages depend on the job role and other personal attributes. Advances in methods (e.g. fixed effects in matching, quantile regressions, Oaxaca-Blinder decompositions) and better data sources (cohort studies, datasets of twins) have enabled us to “clean” estimates of these confounding factors, but the sheer range of factors and the challenge of measuring them means the process is never complete. Skills assessments based on earnings do not give detail as to what specific skills are of value among graduates of that discipline. Input and indirect measures can usefully be covered by the linked HMRC data.

### Output and direct

These methods are very resource intensive but are becoming more widespread because they provide detail of what the person actually does or can do, whether in self reports or in tests or practice based appraisals. Several international skills assessments have been carried by the OECD to identify skills of the adult population using tests<sup>52</sup>. Tests are the most involved of methods although, if robustly implemented, they are also objective and unbiased. However, these tests – and hence changes in skills - are only captured infrequently.

More popular and potentially more frequent than tests are self-reports of skills deployed at work through specific activities. These involve asking the job holder about work activities or working conditions. In the UK successive waves of the UK Skills and Employment Survey<sup>53</sup> have been able to identify a set of 10 generic skills out of 36 different activities<sup>54</sup> and thus declare what skills are more important for what jobs. This method however does not identify skills that are not used at that particular job role. There is also a danger of attaching proficiency to the use of technology, e.g. important use of a pen at work means having writing skills.

### Output and indirect

These methods are based on characteristics of the job role as assessed by someone other than the job holder. The most well-known of these are assessments of skills required for a role made by occupational psychologists (US Dictionary of Occupational Titles) and the employers perceptions of what are the skills requirements for the job. The US Dictionary of Occupations has been widely used because it describes in detail the competencies required for very finely defined job roles. This dictionary, now known as O\*Net<sup>55</sup> is fantastically rich in detail but it is culturally North American (although Dickerson *et al* matched the US descriptors to the UK SOC in 2012 for the UKCES<sup>56</sup>) and it is updated infrequently as it requires external

<sup>50</sup> Wiles, I., & others. (2011). Working Futures 2010-2020: Main Report

<sup>51</sup> Universities UK. (2016).

<sup>52</sup> OECD. (n.d.).

<sup>53</sup> Felstead, A., Gallie, D., & Green, F. (2014).

<sup>54</sup> Felstead, A., Gallie, D., & Green, F. (2014). Section C on the questionnaire in the technical report contains the detailed job analysis questions, op cit. They are of the form, “in your job, how important is... making speeches/ persuading/ selling products/ physical strength/ operating machinery and so on until 36. Factor analysis groups these 36 into 10 generic skills.

<sup>55</sup> National Center for O\*NET Development. (n.d.).

<sup>56</sup> Dickerson, A., Wilson, R., Kik, G., & Dhillon, D. (2012).

detailed assessments of over 900 occupations using 277 skills/abilities descriptions<sup>57</sup>. Less detailed and therefore more frequent (but also based on perception rather than tasks/competencies) are employer assessments of how adequately skilled their workforce are and what skills are lacking, such as the UKCES Employer Skills Surveys and sector based questionnaires such as CBI/Pearson, Engineering UK, those conducted by other of the Sector Skills Councils.

Two recent studies in developing skills descriptors for 4-digit (e.g. very detailed) occupations specifically for the UK and using UK data are worth noting.

- Elias and Purcell (2013)<sup>58</sup> use their judgement to determine the skill content of 4-digit occupations across three categories of skills defined in a prior study: specialist expertise, orchestrating expertise and communication expertise. They validate their skill content definition SOC(HE) looking at the characteristics of job holders and their earnings in the labour force survey.
- Green and Henseke (2014)<sup>59</sup> use a composite index of self-reports from workers on the degree requirements for their job, a subset of the aforementioned detailed job analysis questions, the importance of computers and past training, to impute an indicator of skills requirements also to 4-digit SOC units.

Accepting the limitations of expert academic judgement of what matters for a graduate job or not, these two studies make it possible to classify the skill content of jobs held by graduates just with the SOC code of their job.

Alternatively, direct assessments of the skills possessed or deployed by graduates can be made by adding a short battery of questions that replicate the skills above, either by repeating some but not all of the job analysis questions from the Skills and Employment Survey (see footnote 53) or designing questions that can replicate Elias and Purcell expertise indicators.

Specialist expertise; based on detailed knowledge and/or skills for which the normal foundation is an undergraduate degree course and where these are continually being exercised, developed and/or refined in practical and/or theoretical terms.

Orchestration expertise; high-level competence based on knowledge and skills that may have been developed either in HE or through experience (and most often, both of these). It incorporates the ability to draw together knowledge and knowledge-holders, to direct and co-ordinate activities, assess alternatives, evaluate risks and influence or make high-level decisions on the basis of available evidence.

Communication expertise; knowledge and skills, normally involving well-developed interactive skills, concerned with the exercise of high-level competence in the communication and dissemination of knowledge, ideas and information, between individuals, within groups, or for mass-production or consumption, delivered in person or using digital media

*Elias and Purcell, 2013: 6.*

The categorisation of expertise into 'Specialist', 'Orchestration' and 'Communication' types, stems from prior work for the Futuretrack longitudinal project<sup>60</sup>, which tracked applicants to higher education in 2005, the full-time strand of which, was conducted by Professor Kate Purcell and Professor Peter Elias of Warwick's Institute of Employment Research. Futuretrack examined the development of undergraduate and graduate skills and attributes<sup>61</sup> using a framework derived from a variety of sources, notably the work of Brown and Hesketh<sup>62</sup>, and the 2008 report from the then-DIUS, 'High Skills, High Value'<sup>63</sup>.

<sup>57</sup> See <http://www.onetcenter.org/taxonomy/2009/updated.html> for the updated coding frame

<sup>58</sup> Elias, P., & Purcell, K. (2013).

<sup>59</sup> Green, F., Henseke, G. (2014).

<sup>60</sup> See [http://www.hecsu.ac.uk/current\\_projects\\_futuretrack.htm](http://www.hecsu.ac.uk/current_projects_futuretrack.htm)

<sup>61</sup> Atfield, G., & Purcell, K. (2010).

<sup>62</sup> Brown, P. and Hesketh, A. (2004) 'The Mismanagement of Talent – employability and jobs in the knowledge economy', Oxford: Oxford University Press.

<sup>63</sup> DIUS - The Department for Universities and Skills, & Central office of Information. (2008).

Elias and Purcell examined a large range of skills and attributes and tracked them through university and post-graduation using self-assessment survey. In Stage 3, final year students were asked to rate their own strengths in: written communication; spoken communication; numeracy skills; computer literacy; self-confidence; self-discipline; ability to work in a team; leadership skills and creativity, on a 5 point scale ranging from 'Excellent' to 'Not very good' and then to examine how well they thought their course had helped to develop a wider range of attributes: the ability to apply knowledge; ability to use numerical data; ability to work in a team; awareness of strengths/weaknesses; computer literacy; critical analysis; desire to go on learning; entrepreneurial/Enterprise skills; independence; inter-personal skills; logical thinking; presentation skills; problem-solving skills; research.

## A POSSIBLE QUESTION SET DERIVED FROM UKSES

The Skills and Employment Survey 2012<sup>64</sup>, identifies 10 generic skills used at work in the UK. These skills group together specific tasks and activities performed at work by job holders. Each surveyed worker is asked to identify the importance (from Essential to Not Important at all) of 35 different items. These items are grouped into generic skills as follows:<sup>65</sup>

1. **literacy skills:** both reading and writing forms, notices, memos, signs, letters, short and long documents etc.
2. **physical skills:** the use of physical strength and/or stamina
3. **number skills:** adding, subtracting, division, decimal point or fraction calculations etc., and/or more advanced maths or stats procedures
4. **technical knowhow** knowing how to use tools, equipment or machinery, knowing about products and services, specialist knowledge and/or skill in using one's hands
5. **high-level communication** a range of related managerial skills, including persuading or influencing others, making speeches or presentations, writing long reports, analysing complex problems in depth
6. **planning skills** planning activities, organising one's own time and thinking ahead
7. **client communication** dealing with people, selling a product or service, counselling or caring for customers or clients
8. **horizontal communication** teaching or training and/or working with a team of people, listening carefully to colleagues
9. **problem-solving** detecting, diagnosing, analysing and resolving problems
10. **checking** skills noticing and checking for errors

Green and Henseke<sup>66</sup> use a selection of these as skills required for a graduate job: literacy skills, high level communication, planning skills, specialist knowledge.

In addition to these generic skills, Green and Henseke, who are analysing all jobs not just the jobs of recent graduates, also include supervisory responsibility and having to learn new things at work; as well as whether the job requires advanced or complex use of computers by the job holder, and whether training of at least 2 years is required to do the job well.

The HESA review does not seek to define graduate jobs, but proposes that understanding what skills are used at work will offer opportunities to conceptualise graduate jobs in new ways. Recent graduates are unlikely to have supervisory responsibilities, and they are likely to be learning new things continuously, therefore these two items are deemed as less relevant at six months. Training of two years may also be confounded with the degree. We therefore suggest using only questions on skills, and consider, if deemed relevant, the question about computer use.

<sup>64</sup> See Felstead, A., Gallie, D., & Green, F. (2014).

<sup>65</sup> Following Dickerson, A., & Green, F. (2004).

<sup>66</sup> Green, F., Henseke, G. (2014).

Below is a battery of questions that relate to skills. Surveyed students will be asked how important the component tasks are in their job role, these can then be compounded in skills as above. The first 10 tasks and activities correspond to the skills selected above to define a graduate job. We recommend adding other tasks that are important in finance, health, and education.

**Table 2 Extended question set based on UKSES**

In your job, how important is (tick one only)	Essential	Very important	Fairly important	Not very important	Not important at all
1. Specialist knowledge or understanding					
2. Making speeches and presentations					
3. Persuading or influencing others					
4. Analysing complex problems in depth					
5. Planning your own activities					
6. Planning the activities of others					
7. Thinking ahead					
8. Reading and writing short reports, letters or memos					
9. Reading and writing long documents with correct spelling and grammar					
10. Calculations using decimals, percentages or fractions					
11. Calculations using more advanced procedures					
12. Instructing, training or teaching people, individually or in groups					
13. Cooperating with colleagues					
14. Working out the cause of problems or faults					
15. Thinking solutions to problems					

It is possible to reduce the number of options but this may impact on the ability of the question to adequately gauge skills.

**Table 3 Reduced question set based on UKSES**

In your job, how important is (tick one only)	Essential	Very important	Fairly important	Not very important	Not important at all
1. Specialist knowledge or understanding					
2. Making speeches and presentations					
3. Persuading or influencing others					
4. Analysing complex problems in depth					
5. Planning the activities of others					
6. Reading and writing short reports, letters or memos					
7. Reading and writing long documents with correct spelling and grammar					
8. Calculations using decimals, percentages or fractions					
9. Calculations using more advanced procedures					
10. Instructing, training or teaching people, individually or in groups					
11. Cooperating with colleagues					
12. Working out the cause of problems or faults					

Computers are now part of work life: using a computer is not always equivalent to being literate or proficient in the use of it. The SES asks a question that helps understand the complexity of computer use for work:

*Which of the words in CAPITALS best describes your use of computers or computerised equipment in your job?*

1. ...**STRAIGHTFORWARD** (for example, using a computer for straightforward routine procedures such as printing out an invoice in a shop)
2. ...**MODERATE** (for example, using a computer for word-processing and/or spreadsheets or communicating with others by 'e-mail')
3. ...**COMPLEX** (for example, using a computer for analysing information or design, including use of computer aided design or statistical analysis packages)
4. ...or **ADVANCED** (for example using computer syntax and/or formulae for programming)

## HOW MIGHT WE PROCEED?

In outline, we believe that there is an opportunity to introduce skills measurements in a data product to replace DLHE. Indirect measures of skills developed through HE studies could be reliably and cost-effectively produced through analytical derivations based on existing HESA data (mapping the expected skills development for subjects and course aims), and informed by a suitable skills framework such as those discussed above. These could include elements that are both input-based (derived from the subject of study information in the HESA Student record) and output-based (derived from attainment information in the HESA Student record).

In addition, a set of questions, deployed in a replacement for DLHE, which aims to evaluate graduates' skills usage in the workplace, offers a set of direct measures of skill requirements of jobs by those doing them. By ensuring the skills-based approach used is the same for both sets of measures, we create the possibility of creating a wide range of novel and useful data products – for instance, regional heat-maps of skills development and usage, identification of industries and employers where demand for specific skills is strong, and a new way of identifying graduate jobs, based on skills.

74.	Please indicate your level of agreement with the proposal to develop a skills-based approach in a future survey of graduates <input type="checkbox"/> Very low <input type="checkbox"/> Low <input type="checkbox"/> Moderate <input type="checkbox"/> High <input type="checkbox"/> Very high
75.	What advice would you give us to help maximise the value and minimise the costs of our approach? <div style="border: 1px solid black; height: 40px; width: 100%;"></div>
76.	Further comments <div style="border: 1px solid black; height: 40px; width: 100%;"></div>

## HOW A JOB OPPORTUNITY WAS LOCATED

This question has long been collected by HEPs, and has both practical and analytical value. We would welcome views on its continuing usefulness.

<b>Q17 How did you first find out about this job?</b>		
Your university/college Careers Service	<input type="radio"/> (10)	Employer's website <input type="radio"/> (03)
Other university/college source (e.g. lecturer, website)	<input type="radio"/> (11)	Recruitment agency/website <input type="radio"/> (04)
Media (e.g. newspaper/magazine advertisement)	<input type="radio"/> (02)	Speculative application <input type="radio"/> (07)
Personal contacts, including family and friends	<input type="radio"/> (05)	Already worked there (including on an internship/placement) <input type="radio"/> (08)
Social media/professional networking sites	<input type="radio"/> (12)	Other <input type="radio"/> (09)

**Figure 12 Current DLHE question about how a job was located**

If retained, this question might benefit from the addition of a valid entry focused on graduates working in the 'gig economy' by obtaining work from specialized labour-sourcing online platforms. Another suggestion has been to add "online job board" to improve accuracy of selection.

There is interest in increasing our understanding of how graduates use social capital when finding jobs, and the role that universities play in this.

We welcome general comments to inform our approach in this area.

77. Please indicate your level of support for the continued collection of information about how a job was located  
 Very low  Low  Moderate  High  Very high

78. Please indicate your level of support for the addition of new categories  
 Very low  Low  Moderate  High  Very high

79. Please explain and add any clarification you deem necessary

80. Do you have any further comments to make about the collection of information about how a job was located?

## REASONS FOR TAKING A JOB

Previous reviews have considered the current DLHE question 16 in detail, and the review group considered that it remains an effective way of understanding why a job has been taken, and learning about graduates' decision-making and attitudes.

**Q16 Why did you decide to take the job you will be doing on 12 January 2016?** Please tick ALL the reasons why you decided to take the job and then indicate the ONE MAIN reason for your decision.

	All reasons	Main reason (select one only)
It fitted into my career plan/it was exactly the type of work I wanted	<input type="checkbox"/>	<input type="radio"/> (01)
It was the best job offer I received	<input type="checkbox"/>	<input type="radio"/> (02)
It was the only job offer I received	<input type="checkbox"/>	<input type="radio"/> (03)
It was an opportunity to progress in the organisation	<input type="checkbox"/>	<input type="radio"/> (04)
To see if I would like the type of work it involved	<input type="checkbox"/>	<input type="radio"/> (05)
To gain and broaden my experience in order to get the type of job I really want	<input type="checkbox"/>	<input type="radio"/> (06)
It was in the right location	<input type="checkbox"/>	<input type="radio"/> (07)
The job was well-paid	<input type="checkbox"/>	<input type="radio"/> (08)
In order to earn a living/pay off debts	<input type="checkbox"/>	<input type="radio"/> (09)

**Figure 13 Current DLHE question on reasons for taking a job**

Another key motivation behind this question is to understand whether a job role is part of a plan. There is evidence that graduates with lower-level SOC-code jobs often indicate (using the telephone method) that the job is part of a career plan in their answers. This should be seen as a positive destination, but is arguably hidden in the data. One possibility would be to obtain the graduate's own assessment of being on-track using a separate question, which could employ a mechanism such as a 5-point Likert scale question that asks "are you where you want to be" or "are you where you expected to be", to elicit a general sense of satisfaction with progress. Views are sought on this general approach and the review would welcome advice on this point.

81. Please indicate your level of support for retaining a question about the reasons for taking a job, in the current format  
 Very low  Low  Moderate  High  Very high

82. Would you recommend any changes to the question about reasons for taking a job? Please explain

83. Please indicate your level of support for a separate question that asks the graduate to self-assess whether their work plans are “on-track”  
 Very low  Low  Moderate  High  Very high

84. What wording would you suggest for this question?

85. Please explain your reasoning

86. Do you have any further comments to make about the collection of information about the reasons for taking a job?

## PLACEMENTS AND OTHER WORK-BASED LEARNING

Some data on placements during study are currently collected through the DLHE (such as in Q.15). However, the data is limited in detail. There are now requirements from a wide range of data users to understand work-based learning/activity during study, and be able to track how these experiences relate to later employment outcomes. In order to achieve this, more detailed information on work-based activity would be required. These could have wide-ranging benefits in terms of both demonstrating publicly the range of activity that already occurs, and developing the evidence base for effective work-based learning. However, the review recognises that these data may not currently exist in a format amenable to reporting.

“Work-based learning (WBL) provides the reality of an authentic context for learning which produces the currency of transferable credit. It can enrich student learning, create a well-qualified workforce and open up new markets for HEIs.”

“The term work-based learning includes a wide range of provision where the focus is on situations where the main location for the student is the workplace. The curriculum meets the needs of both HEI and employer and is jointly planned, delivered and assessed. It uses the immediacy of the work context to provide practice and to encourage reflection on real issues leading to meaningful applicable learning.”

(QAA Scotland, 2010<sup>67</sup>)

<sup>67</sup> QAA Scotland - Making it Work: A guidebook exploring work based learning, available at: <http://www.qaa.ac.uk/about-us/scotland/development-and-enhancement/work-based-learning>

We have assumed that work-based learning includes any learning that is part of a course of study, and which takes place in an employment context. If data collection on this area were to go ahead, we would require a careful definition: we welcome comments that will help us to establish one. For work-based placements, sandwich courses, apprenticeships and internships that are part of a course, the location, duration and organisation are the main areas of interest. Other areas of interest include remuneration, credit earned and how the experience was sourced.

If these data were to be collected, the time-lag involved makes it sub-optimal to collect these data through a survey of graduates. Placement data should instead be collected in the HESA Student record, to ensure the data are authoritative, structured and timely. If a suitable record structure can be developed, questions like current DLHE's Q.18 and Q.19 (see **Figure 14**) which seek to make links between current and previous employment, could be replaced with data-linking back to the HESA Student record.

**Q18 Thinking still about your employer on 12 January 2016, did you work for this employer before or during the programme of study you recently completed?**

Yes: before my programme of study  (1) Yes: before and during my programme of study  (3)  
 Yes: during my programme of study  (2) No  (4) **GO TO SECTION C**  (4)

**Q19 In which of the ways listed below did you work for this employer? Please tick all that apply.**

On a sandwich placement  (01) Full-time or part-time work during term time  (05)  
 On another kind of placement or project work  (02) On an internship  (06)  
 As a holiday job  (03) In other ways  (07)  
 Full-time or part-time work all year round  (04)

**Figure 14 Work experience questions in the current DLHE survey**

We welcome respondents' views on the overall approach described above, and scope of the data that should be collected.

Some data users have expressed an interest in broadening data collection to include work-related learning in the curriculum, by which we mean learning that is related to employment, without taking place in an employment context. This would require an appropriate classification scheme as a wide range of educational experiences could be categorized as work-related, including:

- Guest industry lectures
- Work simulations
- Work shadowing
- Employer/industrial visits
- Having an employer mentor
- Live projects set by employers

At many HE providers the HE Achievement Report (HEAR) offers a standardised way of capturing and expressing activities undertaken during study, such as placements. We are interested in understanding the general level of support for an approach based on the HEAR.

Responses are sought on the approach that should be taken in this area, including any comments on feasibility.

87. How would you define work-based learning? How would you delineate the difference between work-based and work-related learning, if at all?

88. Please indicate your level of support for collecting data about placements and other work-based learning in a future data product

Very low  Low  Moderate  High  Very high

a. Please explain your answer

89. Work-based learning in the forms of placements, apprenticeships, sandwich placements and internships would need clear definitions. What definitions would you offer?

90. Is there anything else that should be included in data on work-based learning?

91. Is there anything that should be excluded from data on work-based learning?

92. Please indicate your level of support for collecting data about work-related learning in a future data product

Very low  Low  Moderate  High  Very high

a. Please explain your answer

93. Examples of types of work-related learning, if collected, would need clear definitions. What examples would you give, and what definitions would you offer?

94. Is there anything else that should be included in data on work-related learning?

95. Is there anything that should be excluded from data on work-related learning?

96. Do you currently hold information about either students' work-based or work-related learning as structured data?  Yes  No

97. Would you be prepared to share details of how you structure these data, and if so, please let us know more about your system(s)

98. Does your HE provider currently produce the HEAR?  Yes  No

99. Please indicate your level of support for an approach to capturing placement data based around the HEAR  
 Very low  Low  Moderate  High  Very high

100. Do you agree that, in principle, placement data would be better captured during study, rather than after a graduate has left?  Yes  No

101. Further comments

## NON-PLACEMENT WORK ALONGSIDE STUDY

There remains one area of employment-related information that could be usefully collected from a survey, and that is to determine whether graduates had worked in a capacity not related to their study, during their period of study. Possible sources for these data would be in surveys from around the time of graduation or during the months or years following graduation. These data would complete the ability of data collectors to understand links between work activity during study and later employment. Specifically, graduates should be asked if they had a job or volunteered during their course. There would be additional value in understanding the nature of employment and the reasons for undertaking it, particularly in the case of part-time students.

An alternative approach would be to utilise (by linking) the data from a relevant large-scale exercise such as the BIS-funded Student Income and Expenditure Surveys, to supplement and contextualise existing HESA Student data. While not as granular as individualised census data, these data could potentially be used within a composite data product, to support high-level analyses by region, HE "mission group", or subject.

We welcome comments on this area to inform our approach.

102. Please indicate the level to which you agree that collecting data about non-course-related employment would add value to national HE datasets  
 Very low  Low  Moderate  High  Very high

103. Further comments

104. When do you think it would be best to collect these data  
 During active study  Around graduation  After leaving study

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## EMPLOYMENT IN PARTICULAR PROFESSIONS (INCLUDING TEACHERS AND NHS EMPLOYEES)

Some professions conduct surveys shortly after entering into employment. The DLHE has traditionally assisted in links being made between these professional surveys and previous study, by asking tailored questions – for teachers and workers in the NHS. In future, it may be possible to establish some of these links using HMRC data, and we will investigate the possibilities for this.

Furthermore, a similar approach (either utilising linked data or by surveying using bespoke questions) may be desirable in other professions besides teaching and healthcare, where PSRBs may wish to link their own entrants' surveys back to study information, or to understand the effects of accreditation on later employment. One other possible mechanism for achieving a higher level of linking to later professional employment would be through the identification of a wider range of accreditation information within the curriculum information in the HESA Student record, to enable these links to be made.

There may also be value in 'decliners' information – finding out why students, who elected not to go into the profession for which their study prepared them, made this choice.

105. We welcome exploratory comments on any of the above, particularly from professional, statutory and regulatory bodies.

# CHAPTER 4

## EFFICIENCY AND VALUE FOR MONEY

In this chapter we seek feedback on points of principle relating to the approach that we should be taking, and we ask specific questions relating to the current cost of data acquisition, in order to inform our approach to the detailed design of a replacement for DLHE.

### LOWER COSTS VS HIGHER VALUE

What balance should we strike between reducing costs and securing increased value from a survey? It is helpful for us to understand the context of answers provided elsewhere in the survey (particularly on the part of HE providers).

An example of an area where this context would help is in the further study section of the current DLHE survey, which in Chapter 1 we indicated could be replaced with linked HESA data. Faced with such a scenario we could choose to remove the entire section from the survey to minimise costs, or alternatively, to introduce one or more questions about the motivations for further study, which would create extra value. Thinking about striking this sort of balance generally, where should we aim?

106. Where should we aim (on a scale from 1 to 10, where 1 indicates that minimising costs is the main imperative and 10 indicates that maximising the value of data obtained from the current cost base ought to be the approach)

1  2  3  4  5  6  7  8  9  10

107. Further comments

### ESTABLISHING THE CURRENT COST BASE OF DLHE

We aim to create a data product that is widely regarded as being cost-effective. In order to achieve this, we require a reliable estimate of the costs of running DLHE in its current configuration, to allow reasonable comparisons to be made across the HE sector. We ask all respondents from HE providers to assist us in this aim by providing a costing for running DLHE. This is a one-off exercise to inform the review. Please also feel free to comment or advise on how we approach this area of work. We will combine HE providers' responses with data on the DLHE target population and actual response rates from C13018 from HESA's records to inform our approach.

If your implementation of the DLHE methodology involves asking additional questions following the main survey, please tell us how many additional questions you asked (as long as you asked them of at least 50% of graduates).

To enable costs to be compared, please follow the guidance below when producing the costing.

Costs should be those associated with the most recently completed 2013/14 DLHE survey (C13018) only. This includes both the A (April 2014) and B (January 2015) presentations of the survey.

If actual costs are obtainable, please apply an inflationary uplift (if necessary) to indicate what the costs would be on 01/01/2016. If actuals are not obtainable, please base your cost assumptions on the prevailing rates on 01/01/2016.

## ITEMS TO BE INCLUDED IN THE COSTING

- The cost of all staff time attributed to collection, preparation and submission of the DLHE survey data. This should include both staff time directly involved in conducting the survey, including any technical advice or support from other departments, work undertaken in academic departments, *etc.*
- The cost of recruiting and employing any additional staff working on DLHE during the contact period.
- Pensions, Tax and National Insurance costs directly associated with the proportion of staff time spent on DLHE activity.
- Any room or equipment hire, including external charges or equivalent internal budget transfers incurred as a direct result of undertaking DLHE activity. Providers who do not recognise these costs directly, should include an appropriate space and/or equipment overhead charge at their prevailing rate.
- The costs of third party providers of DLHE collection services.
- The costs of any advertising, prizes or other incentive schemes aimed at boosting DLHE response rates.
- Non-pay costs associated with DLHE, including printing, postage, stationery, text messaging and telephone calls.
- The costs of any training required to support DLHE.
- VAT.
- Capital investments in buildings, software or equipment used solely for DLHE should be represented using a depreciated value that reflects their use during the period of the surveys. Where capital investments are used for DLHE only in part, the figure should reflect only the proportion of activity that relates directly to DLHE.

## EXCLUSIONS FROM THE COSTING

- Staff costs associated with analysing and using the *outputs* of the survey are out of scope.
- The costs of collating student contact details (this would be required under any methodology)
- General overheads.

108.	Overall cost for C13018 (£)	<input type="text"/>
109.	Notes on production of the figures (optional)	<input style="width: 100%;" type="text"/>
110.	How many additional questions did you ask graduates in this presentation of the survey?	<input type="text"/>
111.	Please share any comments you wish to make regarding how we should approach understanding the cost base, or producing a financial case to replace it.	<input style="width: 100%;" type="text"/>

# CHAPTER 5

## METHODS AND MECHANISMS

This chapter explores issues of principle and practicality, relating to the ways data will be sought, and timescales at or for which data will be sought. There are also questions about the future governance of the data product.

### DATES AND TIMINGS

In Section A we explored the issues around changing the dates and timings of the survey at a high level. We are aware that there are issues of detail, and further questions that will need to be raised if the timing of the survey is changed. Please let us know if you wish to make any supplementary points or raise further issues relating to your earlier answers.

112. Further comments on survey timing

### SURVEY STRUCTURE

As discussed throughout the preceding sections, there is an opportunity to increase the value of a survey by asking questions relating to motivation and evaluation, which will contextualize linked data.

The ubiquity of sophisticated survey technology (either for online or supported telephone surveying) now offers the possibility of routing graduates to relevant questions, and avoiding irrelevant ones. We would like to see greater use of this technology.

Separate to discussions of the content of the survey, we have also observed that the structure of any replacement survey could be improved over that of the DLHE, to make the questions flow more easily. To take account of the potential changes discussed above, questions could be grouped and ordered as follows:

- a section that deals with factual information about activity
- a section that deals with motivations behind activity
- an evaluative section that deals explicitly with perceptions of destinations and outcomes.

In some cases this will be difficult to achieve, as some questions have natural follow-on questions that are of a different character. However, in general terms, we believe any future survey would be improved over current DLHE by building-in a more natural conversational 'arc' to the ordering of the questions, and we welcome feedback on this intention.

113. Comments

## THIRD-PARTY METHODOLOGY

One idea with potential is to align the methodology of a future survey of graduates with norms in either social science or market research. At present, the DLHE operates under a bespoke methodology, which serves the end-use requirements for both quality-assured data and high levels of completeness. In future, it may be possible and desirable to see a graduate survey formally conducted under an established code of survey practice, such as the ICC/ESOMAR code<sup>68</sup> for market research, or under the Ethics Guidelines of the Social Research Association<sup>69</sup> or perhaps under another recognised standard. The use of an external standard offers a quality mark that can help reassure graduates and demonstrate publicly that the highest standards are being met. However, this raises issues around response rates – third-party methodologies can restrict the ability to obtain the necessary data to produce statistically significant results.

114. Please indicate your level of support for the adoption of an appropriate externally-recognised standard for a future survey of graduates  
 Very low  Low  Moderate  High  Very high
115. Further comments

## ADDED VALUE

We recognise that DLHE data collection often sits alongside other graduate support processes run (often) by careers services. These processes sometimes result in additional questions being appended to the DLHE. We are keen to support this activity (and to avoid frustrating it), and seek feedback on the nature of these different engagements, what additional questions they result in, and how these contact activities might continue to be supported alongside a more centralised process as posited in the previous section.

116. Please indicate the level of value the DLHE contact process holds for your HE provider (separate to the collection of data)  
 Very low  Low  Moderate  High  Very high  
 a. Please explain
117. Do you ask any additional questions supplementary to the main DLHE survey?  Yes  No
118. How many extra questions? (number)
119. Please share details of the additional questions you ask
120. Would you anticipate continuing to ask these questions (or similar ones) under a centralised process?  Yes  No
121. What functionality or other added value would you like to see from a replacement for DLHE?

<sup>68</sup> ICC/ESOMAR, 2007 (see <https://www.esomar.org/knowledge-and-standards/codes-and-guidelines.php>)

<sup>69</sup> Social Research Association, 2003 (see: <http://the-sra.org.uk/research-ethics/ethics-guidelines/>)

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## IMPLEMENTATION

Although it is too early to indicate the shape of the implementation, it may be possible or desirable to implement changes in stages, or to give a clear timeline for activities that will no longer be required, ahead of finalising their replacements. For example, we might be in a position to trial revised questions ahead of a change in timescale, or to signal that a future presentation of DLHE will no longer be required. We welcome early indications of factors that respondents would like us to take into account when planning for implementation.

122. [Comments on implementation](#)

## CHAPTER 6

# ONWARD USES OF DATA

Destinations and outcomes data have a role in a wide range of public information products, whether offered through the market (such as in the form of league-tables) or as part of a government-backed vehicle (such as Unistats). While this consultation has no remit to dictate onward uses, we think it is valuable to canvass opinion about potential uses for these data, or gaps in provision that could be addressed.

Examples could include:

- a personalised guidance tool for prospective students to evaluate the impact of subject choices or modes of study on later outcomes
- heat-maps showing skills-flows from HE providers and subjects studied to regions and industrial sectors
- heat-maps showing wider social benefits of HE

## LEGAL MATTERS: SHARING DATA

In carefully-defined circumstances, exchange of certain individual-level data could enhance the information available for legitimate public purposes, while reducing cost and increasing quality. An example of this would be further study information: it could become technically feasible for HESA to identify instances of further study, and link these to DLHE survey results (see p.25). It then becomes a matter of putting in place an enabling legal framework to arrange sharing of this information with the previous HE provider, whose DLHE population the graduate is in.

In other cases, there may be legitimate uses for the data, which would not require the transfer of individual-level data.

123.	Would you, in principle, support the development of suitable legal arrangements for the sharing of some individualised linked data?	<input type="checkbox"/> Yes <input type="checkbox"/> No
124.	Further comments	

## CURRENT USES OF SALARY DATA AND FUTURE USES FOR LINKED HMRC EARNING DATA

The SBEE Act enables tax and benefits data to be made available for the Secretary of State or a devolved authority for the purposes of education evaluation and assessment purposes<sup>70</sup>.

The legislation is new, and the data is currently being evaluated. The mechanism by which HMRC and DWP data will be made available, and to whom, will not become clear from some time – and we intend that this consultation will inform thinking in this area. However, there are examples in other parts of the education sector, of data on subsequent attainment being shared with schools, to aid their own planning and evaluation processes.

<sup>70</sup> BIS (2014)

While it is understood that the most granular individualized data is always preferred, data made available by the SBEE Act may also prove useful if available analysed at institution level by subject, course, gender ethnicity, and other factors. We are interested in understanding more about the analysis that data users might wish to see conducted on linked tax/salary and benefits data, and the questions they might wish to answer through such analysis.

In addition to this, linked education data from both HE, and from other parts of the education sector, may offer benefits to HE providers and their students, by providing better quality information on student journeys, and allowing the use of these data for planning purposes.

Respondents are requested to share how they use currently-available destinations and outcomes information in their analyses (if at all), in the form of short case studies.

We also want to understand what uses respondents would wish to put linked data sources (HMRC, DWP, HESA or other education data) to, if they (or a trusted third party) had access to the data. By understanding the appetite for using these data, we will be in a good position to advocate for or design data products that provide the widest range of benefits to students, HE providers, and other data users.

125. How do you currently use destinations and outcomes data? Which specific data? What is the analysis? Which processes are influenced? What is the outcome? Who benefits and how?

Case study 1

Case study 2

Case study 3

126. How could linked data on graduate destinations and outcomes offer new benefits in future? What new analyses or processes could benefit? What would be the outcome? Who would benefit and how?

User story 1

User story 2

User story 3

127. Further comments

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## NOVEL DATA PRODUCTS

In the previous section we asked respondents to consider organisation-level uses for linked destinations and outcomes data. Respondents may also have views about the potential for new uses for these data, that would require action by a national-level body. We will synthesise responses to offer a vision for how destinations and outcomes data could create value in future, by supporting career and study choices, and in other ways.

128. [Suggestions](#)

## CONCLUSION AND NEXT STEPS

Following the close of the consultation period, working group members and HESA staff will analyse responses, and produce a report on findings.

Following the close of the consultation period, we will also have an opportunity to take into account the findings of the independent research that has been commissioned in support of the review, and to reflect on what we have learned from discussions and debate.

We will synthesise these sources of information, to create a design for a new data product. This will take the form of a detailed functional specification of what the data product will be and how any linked data aspects of it should work, details of survey questions, indicative costs, and a draft implementation plan. Taken together, this information will form a draft business case, which will be refined and validated through a further consultation.

Thank you for your time and thought in responding to this consultation.

# SUMMARY OF CONSULTATION QUESTIONS

## Respondent information

1. Name of Organisation (short text)
2. Is this response on behalf of? (please choose the category that fits best) (options: A Higher Education provider / A Further Education provider delivering HE-level courses / A HE sector body / A professional, statutory or regulatory body / A government body / A student representative organisation / An employer or employer organisation / A private individual)
3. Name of contact person for queries (short text)
4. Email address of contact person for queries (email address)
5. Telephone number of contact person for queries (telephone no.)

## Section A – principles and aims

### Data linking: its benefits and limitations

6. Do you agree that linked data can provide a critical part of the data product? (Y/N)
7. Do we need a survey? (Y/N)
8. Does a survey need to be universal (a census of graduates)? (Y/N)
9. Further comments (Text)

### Which data should be collected?

10. Do you agree with the high-level scope of topics? (Y/N)
11. Do you agree with the principle that it is desirable to find appropriate additional ways of measuring graduate outcomes (Y/N)
12. Is there anything we have missed? (Text)
13. Further comments (Text)

### How should data collection relate to post-graduation pathways?

14. Do you think a single survey point can work? (yes/no)
15. If a single survey were to be used, when should this take place? (options: 6 months; 12 months; 18 months; 24 months; 36 months; 48 months; Other (permit a value in months to be entered in a 2-digit integer field)
16. If multiple surveys, which points would be most appropriate? (options: 6 months; 12 months; 18 months; 24 months; 36 months; 48 months; Other (1) (permit a value in months to be entered in a 2-digit integer field) ; Other (2) (permit a value in months to be entered in a 2-digit integer field) ; Other (3) (permit a value in months to be entered in a 2-digit integer field)
17. Further comments and explanations for your answers (text)

### Presentation and financing

18. Do you currently outsource your DLHE data collection process? (radio buttons: Yes / No / No, but we used to / No, but we plan to)
19. Do you think a central survey would provide more demonstrably robust results? (Y/N)
20. What concerns would there be about a central survey? (text)
21. What drawbacks might there be in centralising and/or automating SOC-coding and what weight should they be given? (text box)
22. Please tell us here about any other comments you wish to make in response to this section (text box)

## Section B – discussion and detail

### Chapter 1: General data requirements

#### What activities are graduates engaging in, and which are the most important to them?

23. Do you support the proposal for continued collection of data on activities and main activity? (Y/N)
24. Do you agree with adding examples of additional types of work here? (Y/N)
25. Please indicate your level of support for the following additions:
  - Working more than one job
  - Starting my own business
  - Volunteering
  - On an internship
  - Other (please specify) (Short text box) (On a scale showing 'Very low' / 'Low' / 'Moderate' / 'High' / 'Very high')
26. Please offer any general comments or observations (text)

#### Further study, training and research

27. Please indicate your level of support for the outline proposal to derive basic further study information from linked education data sources (On a scale showing 'Very low' / 'Low' / 'Moderate' / 'High' / 'Very high')
  - a. Please explain your answer (text)
28. Please indicate your level of support for the collection of data about graduate motivations for further study (On a scale showing 'Very low' / 'Low' / 'Moderate' / 'High' / 'Very high')
  - a. Please explain your answer. We would be especially grateful for suggestions for 'categories' of motivation.

#### Personal identifiers, contact information, and opt-out data

29. Please share any comments you wish to make about these basic data. (text)

#### Overall HE experience

30. Please indicate your level of agreement with the working proposal that 'overall HE experience' questions should be discontinued (On a scale showing 'Very low' / 'Low' / 'Moderate' / 'High' / 'Very high')
31. Please share any further comments you wish to make about overall HE experience questions (text)

### Chapter 2: Alternative measures of graduate outcomes

#### Student engagement

32. Please indicate your level of support for the development of an approach to measuring outcomes of graduates based on student engagement data (On a scale showing 'Very low' / 'Low' / 'Moderate' / 'High' / 'Very high')
33. Please share any comments you wish to make about linking to or using student engagement data or survey questions as part of a data product measuring student destinations and outcomes (text)

#### Net promoter score

34. Please indicate your level of support for the inclusion of a Net Promoter question in a survey of graduates (On a scale showing 'Very low' / 'Low' / 'Moderate' / 'High' / 'Very high')
35. What precise wording of the question would you favour? (text)
36. Please explain your answers (text)
37. Do you have any further comments to make about the Net Promoter Score? (text)

#### Subjective wellbeing

38. Please indicate your level of support for the development of an approach based around measuring subjective wellbeing in a future survey of graduates (On a scale showing 'Very low' / 'Low' / 'Moderate' / 'High' / 'Very high')
39. Do you have any further comments to make about Subjective Wellbeing? (text)

**Attributes and skills for life**

40. Please indicate your level of support for the development of a measure of attribute or skills usage, outside of a direct employment context, in a future survey (On a scale showing 'Very low' / 'Low' / 'Moderate' / 'High' / 'Very high')
41. Please share any further comments you wish to make about measuring attributes or skills usage (text)

**Links back to previous surveys or activities**

42. Please indicate your level of support for the development of a synchronised approach between a replacement for DLHE, and earlier surveys or activities (On a scale from 1 to 5, where 5 indicates a high level of support)
43. Does your organisation survey students at the start of their courses? (Y/N)
44. Please share any further comments you wish to make about linking back to previous surveys (text)

**Other self-assessment possibilities**

45. Please share any suggestions or comments you wish to make about alternative measures of outcomes (text)

**Chapter 3: Data requirements – employment****Graduate enterprise**

46. Please indicate your level of support for the inclusion of questions focussing on graduate entrepreneurship, in a future survey (On a scale showing 'Very low' / 'Low' / 'Moderate' / 'High' / 'Very high')
47. Please share any further comments you wish to make about data on graduate entrepreneurship (text)

**Job title, main thing done in job, and SOC code**

48. Please share any comments you wish to make about Job title, main thing done in the job, or the SOC-coding frame or process (text)

**Employer details and Standard Industrial Classification**

49. Please indicate your level of support for continuing to collect employer information (On a scale showing 'Very low' / 'Low' / 'Moderate' / 'High' / 'Very high')
50. Please indicate your level of support for removing employer details from the DLHE, if equivalent data were available from linked data, would you support removing employer details from the DLHE (On a scale showing 'Very low' / 'Low' / 'Moderate' / 'High' / 'Very high')
51. Do you believe that the Standard Industrial Classification offers a sufficient level of detail for your purposes? (Y/N)
52. Would any additional data about employers (whether collected, linked, or sourced as reference data) add value for you? Please explain (text)
53. Do you have any other comments or observations to share regarding employer information? (text)

**Salaries, employment basis and hours of work for graduates in the UK and overseas****Salary**

54. Would you, in principle, support the development of suitable legal arrangements for the sharing of linked data? (Y/N)
55. Further comments (text)
56. Do you agree in principle that we should cease to seek salary data by consent for UK resident graduates, and that salaries should instead be derived from linked data? (Y/N)
57. Do you have any further comments to make about this proposal? (text)

**Employment basis**

58. Please indicate to what level you agree that data on employment basis should continue to be collected (On a scale showing 'Very low' / 'Low' / 'Moderate' / 'High' / 'Very high')
59. Do you agree with the proposal that "Starting-up own business" should be removed from this question, to the question about 'activity'? (Y/N)

- 
60. Do you agree with the proposal that “Voluntary work” should be removed from this question, to the question about ‘activity’? (Y/N)
61. Do you agree with the proposal that “On an internship/placement” should be removed from this question, to the question about ‘activity’? (Y/N)
62. Do you agree with the proposal that “Developing a professional portfolio/creative practice” should be removed from this question, to the question about ‘activity’? (Y/N)
63. Do you have any further comments to make about the collection of employment basis data for graduates? (text)

#### Hours of work

64. Please indicate your level of support for retaining a question that asks: “Approximately how many hours a week will you be working for your main employment?” (On a scale showing ‘Very low’ / ‘Low’ / ‘Moderate’ / ‘High’ / ‘Very high’)
65. Please indicate your level of support for removing any questions about hours of work (and relying only on part-time/full-time splits gathered elsewhere (On a scale showing ‘Very low’ / ‘Low’ / ‘Moderate’ / ‘High’ / ‘Very high’)
66. Please share any further comments you wish to make about the collection of hours of work data for graduates (Text box)

#### Graduates employed overseas

67. Do you agree that we should continue to seek salary data by consent for graduates resident overseas? (yes/no)
68. If we were to continue collecting salary data by consent for graduates working overseas, would you prefer to see actual salary and currency of payment collected through an enhanced survey tool? (yes/no)
69. If we were to continue collecting salary data by consent for graduates working overseas, would you favour continuing to collect details of hours worked and payment periods? (yes/no)
70. Do you have any further comments to make about the collection of salary data for graduates resident overseas? (text)

#### Location

71. Please indicate your level of support for the support the continued collection of employment location information (On a scale showing ‘Very low’ / ‘Low’ / ‘Moderate’ / ‘High’ / ‘Very high’)
72. Please indicate your level of support for the additional collection of domicile location information (On a scale showing ‘Very low’ / ‘Low’ / ‘Moderate’ / ‘High’ / ‘Very high’)
73. Do you have any further comments to make about the collection of location information? (text)

#### Skills

74. Please indicate your level of agreement with the proposal to develop a skills-based approach in a future survey of graduates (On a scale showing ‘Very low’ / ‘Low’ / ‘Moderate’ / ‘High’ / ‘Very high’)
75. What advice would you give us to help maximise the value and minimise the costs of our approach? (text)
76. Further comments (text)

#### How a job opportunity was located

77. Please indicate your level of support for the continued collection of information about how a job was located (On a scale showing ‘Very low’ / ‘Low’ / ‘Moderate’ / ‘High’ / ‘Very high’)
78. Please indicate your level of support for the addition of new categories (On a scale showing ‘Very low’ / ‘Low’ / ‘Moderate’ / ‘High’ / ‘Very high’)
79. Please explain and add any clarification you deem necessary (text)
80. Do you have any further comments to make about the collection of information about how a job was located? (text)

#### Reasons for taking a job

81. Please indicate your level of support for retaining a question about the reasons for taking a job, in the current format (On a scale showing ‘Very low’ / ‘Low’ / ‘Moderate’ / ‘High’ / ‘Very high’)
82. Would you recommend any changes to the question about reasons for taking a job? Please explain (text)

83. Please indicate your level of support for a separate question that asks the graduate to self-assess whether their work plans are “on-track” (On a scale showing ‘Very low’ / ‘Low’ / ‘Moderate’ / ‘High’ / ‘Very high’)
84. What wording would you suggest for this question? (short text)
85. Please explain your reasoning (text)
86. Do you have any further comments to make about the collection of information about the reasons for taking a job? (text)

### Placements and other work-based learning

87. How would you define work-based learning? How would you delineate the difference between work-based and work-related learning, if at all? (text)
88. Please indicate your level of support for collecting data about placements and other work-based learning in a future data product (On a scale showing ‘Very low’ / ‘Low’ / ‘Moderate’ / ‘High’ / ‘Very high’)
- a. Please explain your answer (text)
89. Work-based learning in the forms of placements, apprenticeships, sandwich placements and internships would need clear definitions. What definitions would you offer? (text)
90. Is there anything else that should be included in data on work-based learning? (text)
91. Is there anything that should be excluded from data on work-based learning? (text)
92. Please indicate your level of support for collecting data about work-related learning in a future data product (On a scale showing ‘Very low’ / ‘Low’ / ‘Moderate’ / ‘High’ / ‘Very high’)
- a. Please explain your answer (text)
93. Examples of types of work-related learning, if collected, would need clear definitions. What examples would you give, and what definitions would you offer? (text)
94. Is there anything else that should be included in data on work-related learning? (text)
95. Is there anything that should be excluded from data on work-related learning? (text)
96. Do you currently hold information about either students’ work-based or work-related learning as structured data? (Y/N)
97. Would you be prepared to share details of how you structure these data, and if so, please let us know more about your system(s) (text)
98. Does your HE provider currently produce the HEAR? (Y/N)
99. Please indicate your level of support for an approach to capturing placement data based around the HEAR (On a scale showing ‘Very low’ / ‘Low’ / ‘Moderate’ / ‘High’ / ‘Very high’)
100. Do you agree that, in principle, placement data would be better captured during study, rather than after a graduate has left? (Y/N)
101. Further comments (text)

### Non-placement work alongside study

102. Please indicate the level to which you agree that collecting data about non-course-related employment would add value to national HE datasets (On a scale showing ‘Very low’ / ‘Low’ / ‘Moderate’ / ‘High’ / ‘Very high’)
103. Further comments (text)
104. When do you think it would be best to collect these data (options: During active study / Around graduation / After leaving study)

### Employment in particular professions (including teachers and NHS employees)

105. We welcome exploratory comments on any of the above, particularly from professional, statutory and regulatory bodies. (text)

## Chapter 4: Efficiency and value for money

### Lower costs vs higher value

106. Where should we strike the balance between lowering costs and increasing value of data (On a scale from 1 to 10, where 1 indicates that minimising costs is the main imperative and 10 indicates that maximising the value of data obtained from the current cost base ought to be the approach)
107. Further comments (text)

**Establishing the current cost base of DLHE**

- 108. Overall cost for C13018 (£)
- 109. Notes on production of the figures (optional) (text)
- 110. How many additional questions did you ask graduates in this presentation of the survey? (whole number)
- 111. Please share any comments you wish to make regarding how we should approach understanding the cost base, or producing a financial case to replace it. (text)

**Chapter 5: Methods and mechanisms****Dates and timings**

- 112. Further comments on survey timing (text)

**Survey structure**

- 113. Comments (text)

**Third-party methodology**

- 114. Please indicate your level of support for the adoption of an appropriate externally-recognised standard for a future survey of graduates (On a scale showing 'Very low' / 'Low' / 'Moderate' / 'High' / 'Very high')
- 115. Further comments (text)

**Added value**

- 116. Please indicate the level of value the DLHE contact process holds for your HE provider (separate to the collection of data) (On a scale showing 'Very low' / 'Low' / 'Moderate' / 'High' / 'Very high')
  - a. Please explain (text)
- 117. Do you ask any additional questions supplementary to the main DLHE survey? (Y/N)
- 118. How many extra questions? (number)
- 119. Please share details of the additional questions you ask (text)
- 120. Would you anticipate continuing to ask these questions (or similar ones) under a centralised process? (yes/no)
- 121. What functionality or other added value would you like to see from a replacement for DLHE? (text)

**Implementation**

- 122. Comments on implementation (text)

**Chapter 6: Onward uses of data****Legal matters: sharing data**

- 123. Would you, in principle, support the development of suitable legal arrangements for the sharing of some individualised linked data? (Y/N)
- 124. Further comments (text)

**Current uses of salary data and future uses for linked HMRC earning data**

- 125. How do you currently use destinations and outcomes data? Which specific data? What is the analysis? Which processes are influenced? What is the outcome? Who benefits and how? Case study 1 (text), Case study 2 (text), Case study 3 (text)
- 126. How could linked data on graduate destinations and outcomes offer new benefits in future? What new analyses or processes could benefit? What would be the outcome? Who would benefit and how? User story 1 (text), User story 2 (text), User story 3 (text)
- 127. Further comments

**Novel data products**

- 128. Suggestions (text)

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