

## Quality Report for Northern Ireland Destinations of Leavers from Higher Education Statistical Bulletin

### 1. Introduction

The Department for the Economy (DfE) adheres to the [UK Statistics Authority code of practice](#) for official statistics and the National Statistician's guidance on quality.

This document provides a summary of how the following Higher Education (HE) National Statistics publication adheres to the code in terms of quality:

[Destinations of Leavers from UK Higher Education Institutions – Northern Ireland analysis](#)

The evidence of the quality of this publication is reported in Section 3 and is based on the nine European Statistical System quality dimensions and principles. A summary of methods used to compile this statistical publication is also provided in section 4.

### 2. Data Source

Information on Northern Ireland (NI) students studying at UK Higher Education Institutions (HEIs) and all students studying at NI HEIs are collected by the Higher Education Statistics Agency (HESA). HESA collects information for all publicly funded universities throughout the UK. Contracts in place between HESA and statutory users (including DfE) require that the data be of sufficient quality for statutory users' funding and policy purposes and sanctions may be applied against HESA and HEIs should these quality standards not be met.

Information on the destinations of leavers from Higher Education (HE) are collected through the HESA Destinations of Leavers from Higher Education (DLHE) survey. This survey is carried out annually through surveys and a data collection process, approximately six months after they have completed their HE qualification.

### 3. Data Quality Report

Dimension	Assessment by the author
Relevance	<p><b><i>The degree to which the statistical product meets user needs in both coverage and content.</i></b></p>
	<p>The Destinations of Leavers from Higher Education (DLHE) bulletin is designed to give an overview of the employment information of students from NI who studied at HEIs in NI and GB, and also all students who attended NI HEIs, approximately six months after completing their qualification. The information is broken down by a number of variables including – gender, age, mode and level of study, subject, location of institution and domicile. The report also provides UK figures for comparison.</p> <p>The statistical bulletins are used by a variety of customers, both internal and external. For example, they are used by DfE policy development officials to monitor existing policies, and for future planning; by other government departments and agencies such as the Northern Ireland Statistics and Research Agency (NISRA); by prospective students to inform their choices around higher education; and by local businesses to quantify the supply of graduates in their business area. Customers’ views on the bulletins and feedback from previous years have been very positive. Results from previous customer surveys can be viewed at <a href="https://www.economy-ni.gov.uk/articles/publications-schedule-statements-and-consultations">https://www.economy-ni.gov.uk/articles/publications-schedule-statements-and-consultations</a></p> <p>Further information on how customers’ needs are assessed can be found in the section below titled ‘Assessment of User Needs and Perceptions’.</p>
Accuracy and Reliability	<p><b><i>The proximity between an estimate and the unknown true value.</i></b></p>
	<p><u>Data Collection</u></p> <p>Information presented in the DLHE statistical bulletin is based on data returned to HESA by the HEIs through a secure web-based transfer system. The HE institution at which each student was registered is responsible for submitting the data about that student to HESA. The data are collected through the HESA DLHE survey. This survey is carried out annually, approximately six months after they have completed their HE qualification.</p> <p>The survey is undertaken by leavers answering a questionnaire by way of a telephone survey, a centrally-hosted online survey, a locally-hosted survey or a PDF version. HESA provides paper questionnaires for sending out by post for leavers to use for reference when HEIs conduct a telephone survey. HESA also hosts an online version of the questionnaire and institutions can email out a link to this to any leaver who has provided an email address. A PDF version of the paper questionnaire is also provided should institutions wish to email this version for leavers to print and return.</p> <p>Institutions can use any of these versions for initial contact or for follow-up contact (should they not hear from the leaver after a first attempt at contacting them). The methodology rules are not rigid; institutions can choose their own methodology sequence using as many of the contact methods as they like. Each institution can choose the sequence of contact which they consider to be the most effective for achieving a good level of response from their leavers. For example, an institution might wish to start with telephoning and then send</p>

postal questionnaires or a link to the online version to all those who they have not been able to contact by telephone.

If more than one response is received HEIs should submit the latest or most complete version of a questionnaire to HESA. This guidance only relates to instances where a second response is received unsolicited. HEIs should not actively seek further responses once a response is received.

An explicit refusal is where a leaver either sends back a questionnaire marking it as a refusal, emails, or writes a letter including a statement that they do not wish to be included in the survey. It can also result from a telephone conversation where the leaver verbally states that they do not wish to be included in the survey. A leaver who does not respond in any way or is not contactable should not have a DLHE record returned to HESA and is not regarded as having explicitly refused. Leavers with DLHE records identified as STATUS=08 'Reply received explicitly refusing to provide information' will be counted towards an institution's response rate.

In order to provide the sector with the best possible statistics, institutions are required to meet specific target response rates for the DLHE survey. All institutions are expected to meet, or exceed, these thresholds and HESA carry out extensive data quality checks to monitor both short and long term success with this regard. The target response rates are:

- 80% for UK domiciled (i.e. home) leavers who previously studied full-time;
- 70% for UK domiciled leavers who studied part-time;
- 80% for Research Council-funded students; 50% for all other EU students.

The response rates for the DLHE survey are set to ensure that detailed data can be published and that the results of the survey genuinely reflect the outcomes for students leaving institutions. Therefore, while response rates are set at the institution level, HEIs should seek to ensure that as far as possible the target threshold is met for all courses, and also that response rates are uniform across all student and course characteristics. In particular, specific groups of students should be targeted for additional follow-up where response rates in previous years have been significantly lower than the institutional average.

It is compulsory for institutions to contact all non-EU international leavers electronically (using the DLHE Online Survey is recommended), although the use of telephone and postal follow-up remains optional. HEIs are strongly encouraged to achieve the highest possible response rate for non-EU leavers. Achieving the highest possible response rate will allow statutory customers to assess the destinations of non-EU leavers in order to inform debates on the impact of UK HE. The data will also help HEIs better understand their international study body. Response rates for non-EU leavers reached 34% in 2015/16 (the same percentage as in 2014/15). Response rates vary across the sector, and within different activities. As a result, there could be bias in the non-EU data, and so the data for these leavers are excluded from the analysis. A further assessment of surveying these leavers will be undertaken in order to inform a decision on a more appropriate target response rate. These leavers are excluded from the bulletin until the information collected has been carefully reviewed.

	<p>All data quality issues are kept to a minimum by having in place stringent quality assurance checks and validation procedures.</p> <p>The institutions data must go through over 700 validation checks in order for a return to be accepted. These checks ensure that the data are accurate in terms of format and logic. There are specific validation checks for NI HEIs which cover variables collected from NI HEIs only, for example, religion, dependents and marital status. Year-on-year changes are examined closely to see if they fall outside of an expected range and counts of students are also compared annually with returns made to funding bodies in respect of state funding allocation. Any issues arising from any of the above stages of quality assurance are returned to the institution to verify.</p> <p>In terms of missing data items, the majority of data items are collected for all students. However, some variables are only collected for a particular set of students, for example, religion, marital status and dependents are collected only for NI domiciled students at NI HEIs. In addition, some data items include categories for 'unknown' or 'information refused' and not all data items are mandatory for a student to provide. In such cases, definitions and notes are provided within the statistical bulletin. The level of unknown entries within data items are routinely monitored during the data collection process. Any HEI recording abnormally high levels of unknown values in key data items are strongly encouraged to reduce this level over time.</p> <p>In previous years, DfE has hosted data quality seminars for the four NI HEIs. These seminars provided institutions with the platform to interact with HESA in order to update and improve their data quality methods.</p> <p><u>Production of statistics</u></p> <p>On receipt of destinations data from HESA, DfE statisticians merge this UKDLHE file with the NI specific datasets produced for the enrolments and qualifications bulletins. This is then cross-verified, across a range of variables, with previously published HESA data. Prior to publication, DfE's bulletins will undergo rigorous checking procedures including peer-review of syntax used to analyse data from the HESA databases, parallel production of data tables using pivot tables and statistical software packages, and extensive proof-reading of commentary, tables, notes to readers and definitions. Finally, publications also require senior staff sign-off before release.</p>
<p><b>Timeliness and Punctuality</b></p>	<p><b><i>Timeliness refers to the time gap between publication and the reference period. Punctuality refers to the gap between planned and actual publication dates.</i></b></p> <p>The DLHE consists of two survey periods relating to two different census dates – one in April and one in January. The two census dates reflect the two main course completion times for students; those who finish between 1 August and 31 December will be surveyed during the following April, whereas those who complete their courses between 1 January and 31 July will be surveyed the following January. Therefore, the whole survey spans two reporting periods. The dates chosen are nominal and aim to provide a picture of graduate activity approximately six months after completion.</p> <p>The field work period, that is, when data can be captured from leavers, is approximately three months for both the April and January surveys. For the April survey the field work commences on the census date and closes in June.</p>

	<p>The questions are in the past tense for these leavers as they will receive their questionnaire on or after the census date.</p> <p>For the January survey, most of the field work takes place ahead of the census date and so the questions are in the future tense. This is because it is acknowledged that many leavers return to their parents for Christmas and so it is an ideal opportunity to contact them at what may be the last known address provided by them. The field work runs through to the beginning of March.</p> <p>Although there are two data capture reference dates, there is only one data collection, the return date for which is 31 March. The completed questionnaires are stored safely until the data needs to be returned to HESA in March. This schedule outlines the timescales of the processes:</p> <p><a href="https://www.hesa.ac.uk/collection/c15051/introduction">https://www.hesa.ac.uk/collection/c15051/introduction</a></p> <p>The data then goes through rigorous validation checks with HESA to ensure it is of sound quality. Preliminary data, in the form of pivot tables, is sent to statisticians in each of the UK regions prior to a Statistical First Release (SFR) of the data by HESA in June. DfE publishes their own SFR parallel to HESA's, which details a high level analysis of DLHE data. The complete data file is then sent to HESA's statutory customers (including DfE) by the start of July, at which time DfE subject the data to further validation and quality checks. The DLHE bulletin is then released by DfE in August.</p> <p>DfE's Higher Education publication dates are pre-announced through its <a href="#">publication schedule</a> on the DfE website and through the National Statistics Gov.uk <a href="#">release calendar</a> system. In previous years, DfE has always met its pre-announced dates for Higher Education statistical bulletins. In the event that a pre-announced publication date cannot be met, then this will be announced on the DfE website along with the reasons for the delay.</p> <p><u>New DLHE</u></p> <p>Between July 2015 and June 2017, HESA conducted a major review of destinations and outcomes data. The new Graduates Outcomes survey will be replacing both the six month and longitudinal Destination of Leavers from Higher Education (DLHE) publications in the future. This survey will be carried out approximately 15 months after qualifying, with the first survey running in December 2018 and the first results are expected to be published in January 2020.</p>
<p><b>Accessibility and Clarity</b></p>	<p><b><i>Accessibility is the ease with which users are able to access the data, also reflecting the format in which the data are available and the availability of supporting information. Clarity refers to the quality and sufficiency of the metadata, illustrations and accompanying advice.</i></b></p> <p>DfE's Higher Education statistical bulletins are made available on the Department's website <a href="https://www.economy-ni.gov.uk/topics/statistics-and-economic-research/higher-education-statistics">https://www.economy-ni.gov.uk/topics/statistics-and-economic-research/higher-education-statistics</a> and through a link on the National Statistics Gov.uk publication system <a href="https://www.gov.uk/government/statistics?keywords=&amp;topics%5B%5D=all&amp;departments%5B%5D=department-for-employment-and-learning&amp;from_date=&amp;to_date=">https://www.gov.uk/government/statistics?keywords=&amp;topics%5B%5D=all&amp;departments%5B%5D=department-for-employment-and-learning&amp;from_date=&amp;to_date=</a>. A general press release is also issued along with an announcement on the Northern Ireland Statistics and Research Agency's (NISRA's) <a href="#">Facebook page</a> and DfE's analytical service <a href="#">Twitter feed</a>.</p>

	<p>Recently this has been supplemented with an infographic on both social media and the Departmental website which summarises the data in an image/poster.</p> <p>Customers who have registered their details with the department will have links to the bulletins emailed to them shortly after release. Paper copies of the publications are also made available to users on request free of charge.</p> <p>Data tables are published on the DfE website in excel format and recently also Comma-Separated Values (CSV) format to allow users to carry out further analysis. Users can also request further breakdowns and analysis of the data which along with the statistical bulletins are provided free of charge.</p> <p>Each statistical bulletin includes a section with definitions and notes to readers addressing issues of methodology, coverage and data quality.</p> <p>Feedback from customers about the format and release practices regarding the bulletins has been very positive. Results from previous customer surveys can be viewed at <a href="https://www.economy-ni.gov.uk/articles/publications-schedule-statements-and-consultations">https://www.economy-ni.gov.uk/articles/publications-schedule-statements-and-consultations</a>.</p>
<p><b>Coherence and Comparability</b></p>	<p><b><i>Coherence is the degree to which data that are derived from different sources or methods, but refer to the same topic, are similar. Comparability is the degree to which data can be compared over time and domain.</i></b></p> <p><u>Coherence</u></p> <p>The information collected by HESA regarding NI students at UK HEIs and students at NI HEIs is the most comprehensive source of information on HE in the UK. However, other HESA statutory customers use their data to produce similar reports to that produced by DfE. There is also a National Student Survey (NSS) produced by 'Unistats'. The NSS is very different to the DLHE survey for a number of reasons. The NSS looks at groups of statements which cover topics such as:</p> <ul style="list-style-type: none"> <li>• The teaching on the course</li> <li>• Assessment and feedback</li> <li>• Academic support</li> <li>• Organisation and management</li> <li>• Learning resources</li> <li>• Personal development</li> </ul> <p>This lets students have a say about their student learning experience and is very different to the focus of the DLHE publication, which looks primarily at the employment activity of the past student and breaks this down by a number of student characteristics such as gender, age, subject area studied, salary etc.</p> <p>In addition to the difference in coverage, there is also the possibility of differences in definitions used to present student numbers due to the fact that <i>Unistats</i> collect their own data for the NSS and do not rely on HESA data.</p> <p>HESA data for NI only covers students who study HE through a Higher Education Institution (HEI), however students can also study HE courses through Further Education (FE) colleges. Information on the destinations of this group of leavers is therefore not included within the DLHE statistical bulletin.</p>



	<p><u>Comparability</u></p> <p>HESA is the official agency for the collection of information on publicly funded Higher Education (HE) institutions in the UK. It was set up in 1993 following the White Paper 'Higher Education: a new framework', which called for more coherence in HE statistics. This joint approach throughout the UK had ensured direct comparisons between countries and individual institutions can be made. The specification and definitions of data are subject to a major review every few years. From time to time it is necessary to change definitions which can impact the comparability of time series data. When this does happen any discontinuities in the data are made clear and/or data are backdated to take account of the new definitions. For example, from the 2007/08 academic year the definition of HESA's Standard Registration Population changed to exclude those students who were writing-up or on sabbatical. In order to maintain time series accuracy, all historical data published or released by DfE in and after the 2007/08 enrolments bulletin uses the new Standard Registration Population definition. Any changes in comparability of data is addressed in the statistical bulletin in the notes and definitions section.</p>
<p><b>Trade-offs between Output Quality Components</b></p>	<p><b><i>Trade-offs are the extent to which different aspects of quality are balanced against each other.</i></b></p> <p>The HEIs must submit their data to HESA retrospectively, six months after the end of each academic year. The HEIs are given about six weeks to get their data passed through HESA's stringent validation procedures. In order for all the data to be collected on time, the data collection process allows some tolerance in respect to missing values for certain variables, and also for the response rate for the HEI; however, HEIs are extensively encouraged to maintain the highest possible response rate in order to give an accurate depiction of the activities of its leavers. This trade-off between timeliness and accuracy allows customers to have information as soon as possible after the period to which it refers.</p>
<p><b>Assessment of User Needs and Perceptions</b></p>	<p><b><i>The processes for finding out about users and uses, and their views on the statistical products.</i></b></p> <p>DfE statisticians ensure that its HE statistical products are relevant to its customers in a number of ways. DfE statisticians hold regular meetings with DfE policy development officials to ensure that statistical products on HE allow them to effectively develop new and monitor existing policies. At these meetings DfE statisticians present information from the statistical bulletins and seek feedback from those in attendance. If any suggested changes received are deemed appropriate, they can then be incorporated in the next publication. Customers' views on the bulletin and feedback from previous years have been very positive. Results from previous customer surveys can be viewed at <a href="https://www.economy-ni.gov.uk/articles/publications-schedule-statements-and-consultations">https://www.economy-ni.gov.uk/articles/publications-schedule-statements-and-consultations</a>.</p> <p>There is also a section included in bulletins which asks if any reader has any feedback on the bulletin that they wish to contribute. There is also contact information for members of the Department who the reader can contact if they have a need for further information or clarification.</p> <p>All HESA collections undergo a major review cycle every few years to ensure that the data collected is relevant for the current and future needs of customers. DfE statisticians feed into these reviews ensuring that the requirements of NI government are addressed. <i>For example, questions on religion, marital status</i></p>

	<p><i>and dependents were introduced for NI HEIs only, to allow our customers to meet their equality monitoring needs.</i></p>
<p><b>Performance, Cost and Respondent Burden</b></p>	<p><b><i>The effectiveness, efficiency and economy of the statistical output.</i></b></p> <p>The estimated costs, based solely on staff time involved in analysing databases, producing tables, writing narrative, updating notes to readers, formatting the bulletin, quality assuring and disseminating hard copies of the bulletin is listed below:</p> <p>Destinations of Leavers from UK Higher Education Institutions: Northern Ireland analysis - £2,500</p> <p>Please note that that there are other significant costs involved in producing and maintaining the datasets from which the bulletin is derived, however, these costs would be incurred regardless of whether or not the bulletin is produced.</p> <p><i>Information used to produce this statistical bulletin is collected using the DLHE survey. As it is a survey taken after graduation there is a certain level of respondent burden on the students, however there are a number of different ways the student can complete the survey and the student is given three months to complete the survey, so respondent burden is kept to a minimum where possible while trying to maintain a high level of response.</i></p>
<p><b>Confidentiality, Transparency and Security</b></p>	<p><b><i>The procedures and policy used to ensure sound confidentiality, security and transparent practices.</i></b></p> <p>The following procedures are in place to ensure that data are kept secure and that information released does not identify individuals:</p> <p>Data are supplied by HE institutions to HESA via a secure web-based transfer system created and maintained by HESA. HESA supply data to DfE statisticians (and other statutory users) via a secure web-based download system. The data are held in DfE on a secure network that can only be accessed by HE statisticians.</p> <p>To prevent the identification of individuals, figures in publications are rounded to the nearest 5, in line with <a href="#">HESA rounding strategy</a>, with 0, 1 &amp; 2 rounded to 0. DfE conform to the <a href="#">HESA rounding strategy</a> in its entirety.</p>



## **4. Summary of methods used to compile the output**

### Data Collection

Data are supplied by HE institutions (HEIs) to HESA via a secure web-based transfer system created and maintained by HESA. The data supplied are subject to an extensive quality assurance process by both HESA and DfE.

The first stage of the quality assurance process in HESA includes a suite of validation checks, which ensure that the data collected meet specification, dates fall within expected ranges and the information provided within fields of data are consistent. Failures at this stage may cause a data return to be rejected, requiring a re-submission from the HEI once corrected. The second stage of quality assurance comprises a verification process whereby frequency counts and cross-tabulations are produced automatically from the data submission of each HEI and these are fed back to the HEI. A team of quality assurance analysts at HESA also scrutinise this material. Year-on-year comparisons provide a summary of changes and the level of change in any particular area is examined closely if it falls outside of an expected range. Any issues arising from this stage of quality assurance are logged within an online system to which the submitting HEIs have access. HEIs must respond to each issue to either confirm that anomalies are genuine or correct the data and re-submit. The final stage of the quality assurance process is a sign-off by the head of each HEI confirming that data meet required quality standards and are fit for onward use.

HESA then supply the final data to DfE statisticians (and other statutory users) via a secure web-based download system.

Contracts in place between HESA and statutory users (including DfE) require that the data be of sufficient quality for statutory users' funding and policy purposes and sanctions may be applied against HESA and HEIs should these quality standards not be met. The quality standards set by statutory users are deemed more than adequate for the purposes of production of Official Statistics.

### Production of statistics

On receipt of destinations data from HESA, DfE statisticians merge the UKDLHE file with the NI specific datasets produced for the enrolments and qualifications bulletins, one for NI students enrolled at UK HEIs and the second for all students enrolled at NI HEIs. This is then cross-verified, across a range of variables, with previously published HESA data. Once the datasets are completed and verified they are used to prepare the DLHE statistical bulletin. Prior to publication, DfE's bulletins will undergo rigorous checking procedures including peer-review of syntax used to analyse data from the HESA databases, parallel production of data tables using pivot tables and statistical software packages, and extensive proof reading of commentary, tables, notes to readers and definitions. Finally, publications also require senior staff sign-off before release.

### **Useful Links:**

HESA's summary report on quality for the Student Record can be accessed from the following link: <https://www.hesa.ac.uk/collection/c15051/introduction>