Quality Report for

Further Education Activity in Northern Ireland Statistical Bulletin

Introduction

Further Education Activity in Northern Ireland statistics are published annually by the Department for the Economy (DfE). The latest publication includes statistics on Further Education (FE) enrolments, qualifications and performance from 2013/14 to 2017/18.

This data quality report comments on the European Statistical System's Dimensions of Quality. There are five dimensions which aim to give a broad understanding of the quality of a statistical output. These are:

1. Relevance
2. Accuracy and Reliability
3. Timeliness and Punctuality
4. Accessibility and Clarity
5. Comparability and Coherence

Furthermore, Eurostat asks the producers of official statistics to comment on the following four principles when reporting quality:

1. Trade-offs between output quality components
2. Assessment of user needs and perceptions
3. Balance between performance, cost and respondent burden
4. Confidentiality, transparency and security

The information presented in this statistical bulletin has been derived from the Consolidated Data Return (CDR), which is provided by FE colleges.

The CDR came into operation for the 2013/14 academic year and is used for analysis related to the years 2013/14 to 2017/18. Each of the data returns are computerised data files consisting of individual records for each enrolment recorded by FE colleges during each academic year.

The CDR brings together into a single dataset the five main individual Departmental returns from FE colleges, namely, Funded Learning Unit (FLU), Further Education Statistical Return (FESR), Essential Skills Enrolment Return (ESER), Entitlement Framework (EF) and Further Education Leavers' Survey (FELS).

DfE statisticians adhere to the UK Statistics Authority's [Code of Practice for Statistics](#) and [National Statistician's Guidance](#).

Quality Report

Dimension	Assessment by the author
Relevance	***The degree to which the statistical product meets user needs in both coverage and content.***
	The [statistical bulletin](#) presents a range of analysis regarding enrolments (both regulated and non-regulated) in the Northern Ireland Further Education Sector covering academic years 2013/14 to 2017/18. The statistics presented cover the characteristics of those enrolling in FE colleges along with analysis of areas of deprivation, funding streams and performance (retention, achievement and success rates). The information presented in this statistical bulletin will be of interest to a wide variety of people. For example the statistics within, and those derived from, this bulletin are currently used by DfE policy officials in their role of assisting and advising the Minister for DfE to discharge his duties; by the NI Assembly and DfE committee to scrutinise the FE sector; by other government departments such as the Department of Education; by prospective students to inform their choices around further education; by local businesses to quantify the supply of those qualifying in their business area; and by researchers and academics to try and understand the underlying trends in FE. Further information on how customers' needs are assessed can be found in the section below titled 'Assessment of User Needs and Perceptions'.
Accuracy and Reliability	***The proximity between an estimate and the unknown true value.***
	Data Collection The information presented in the FE Activity in Northern Ireland statistical publication is based on data returned to the department by the FE Colleges. As these returns cover all students who enrol at each college issues relating to sampling error and estimates are not relevant to this data. Instead, the accuracy of the information returned and the scale of missing

data are more important. Such issues are kept to a minimum by having in place stringent data quality checks and validations procedures.

The FE College at which each student is registered is responsible for the quality of the enrolment data contained within the data returns. Although each FE College has its own validation checks which are performed on the enrolment data, there are also over 200 validation checks which have been developed in conjunction with DfE statisticians. This process has evolved over time, for example, from a smaller set of validations specific to each individual historical return to an accumulation of all validations and the introduction of new validation checks reflecting changing DfE policies. Together these checks ensure that the data is accurate in terms of format and logic.

Since 2013/14 FE Colleges receive a daily CDR file to manage their data quality. A CDR and an automated CDR validation report are produced four times a year and submitted to DfE. This provides DfE with an in-year look at the quality of the FE enrolment data. Any issues arising from the in-year or end of year validation stages, in terms of quality assurance, are returned to the college to verify, comment on and correct as appropriate.

In terms of missing data items, the majority of data items are collected for all students. Some data items may 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 FE College recording abnormally high levels of unknown values in key data items are informed of these levels, by the relevant statistician, and strongly encouraged to reduce this level over time.

DfE statisticians who work with the FE data attend Management Information System (MIS) Manager meetings every two months. These meetings provide FE Colleges with a platform to interact with each other, and with DfE, to discuss data issues and to develop projects to improve data quality.

| | FE Colleges are also subject to annual audits through both i) the department and ii) the commissioned accounting organisation. These audits include assessments on the data integrity and data recording within certain processes of enrolment data.

Production of statistics

On receipt of data from FE Colleges, DfE statisticians produce a single Northern Ireland (NI) FE enrolment dataset which is verified across a range of variables with previously published FE data. Prior to publication, DfE's statistical bulletins undergo rigorous checking procedures. These procedures include: peer review of the syntax used to analyse data from the CDR databases; parallel production of data tables using pivot tables and statistical software packages; and, extensive checking and proof reading of commentary, tables, notes to readers and definitions. Finally, publications also require senior staff sign-off before release. |
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| **Timeliness and Punctuality** | ***Timeliness refers to the time gap between publication and the reference period. Punctuality refers to the gap between planned and actual publication dates.*** |
| | FE Colleges can collect information prior to an academic year commencing. For example, in the most recent academic year 2017/18 (1st August 2017 to 31st July 2018), the data collection process could have opened as early as January 2017 to enable the collection of application data before the academic year started.

If an individual is accepted onto a course, the information collected about them at application stage is transferred into their enrolment record. Their enrolment record is subsequently transferred by the FE College at which they enrolled into the data extract (CDR) which DfE receives on all FE Colleges.

Data will also be collected by FE Colleges during the academic year, and after the academic year ends. This is because Colleges usually have to wait until after the end of the academic year to collect qualification results from awarding organisations.

The final CDR (FE College) enrolment data for an academic year are extracted in mid-October. Accounting Officers in FE |

	Colleges sign off the mid October extract as reflective of the provision delivered over the course of the previous academic year, and it is then supplied to DfE statisticians.

DfE statisticians then created and verified the FE enrolment dataset and developed and quality assured the FE Activity statistical bulletin until near the end of November 2018.

DfE's Further Education publication dates are pre-announced through the publication schedule on the DfE website and on the GOV.UK statistics release calendar.

The FE Activity bulletin is routinely published in the first week of December. DEL published its latest FE Activity in FE Colleges in Northern Ireland statistical bulletin on 29 November 2018. |
| **Accessibility and Clarity** | ***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.*** |
| | DfE's Further Education statistical publications are made available on the Department's website and through GOV.UK. In addition to a general press release, announcements are issued on the DfE Twitter feed and on the Northern Ireland Statistics and Research Agency's Facebook page and Twitter feed.

Shortly after release, customers who have registered their details with the department receive an email containing a web link to the bulletin. Paper copies of the publications are also made available to users on request.

To allow users to carry out further analysis, data tables are published on the DfE website in Excel and OpenDocument formats. Users can also request further analysis of the data from the department. Analysis and statistical bulletins are provided free of charge.

Each statistical bulletin includes a section of explanatory notes, as well as annexes of definitions and technical notes. A |

	metadata tab accompanies the data tables, covering definitions and methodology. The bulletin is extensively illustrated throughout with suitable charts.
Coherence and Comparability	*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.*
	Coherence The only comprehensive source of information on provision within FE Colleges in Northern Ireland, the Northern Ireland College Information System (NICIS), is used to collect information on students. However, in addition to NICIS, FE Colleges also use the Trainee Management System (TMS)/Client Management System (CMS) Management Information System (MIS). TMS/CMS is used by Colleges to record any provision delivered within an FE College and funded through one of the DfE training or employment programmes. Therefore, if an enrolment is delivered within a FE College and funded through a DfE training or employment programme, the same enrolment should be keyed onto both the NICIS and TMS/CMS information systems. The difference between the two systems is the type of enrolment data each records: the NICIS focuses on all enrolments and outcomes of provision, irrelevant of funding; the TMS/CMS includes only a subset of all FE College provision, only provision funded through training or employment programmes. There are different methodologies and terminology, in terms of counting provision (enrolments from NICIS or starts/occupancy from TMS/CMS) therefore care must be taken into account if comparing NICIS and TMS/CMS data for FE Colleges. Comparability NICIS was originally procured in 2003, and delivered a shared service within FE Colleges for the provision of an information management system including, support and maintenance. NICIS covers all core business areas including student

	management, personnel/payroll management, Estates management and finance. Alignment of data fields ensures that direct comparisons between individual colleges can be made. Each year FE Colleges and DfE review the specification of data extracts and definitions. From time to time it is necessary to change definitions and this can impact the comparability of time series data. Any discontinuities in the data are made clear and data are backdated, where possible, to take account of the new definitions. In each of DfE's Further Education statistical bulletins comparisons are made over time and between FE Colleges. At present, comparison across the four UK regions is only available on certain measures such as enrolment counts. Other figures, such as success rates, are not directly comparable with each other. There is no other work underway to facilitate comparison across the four UK regions. Such work to match methodologies across the four regions would likely be led by a working group within Children, Education & Skills (CES) at ONS. After this, the next step would be the development of one consistent methodology to be used all four regions.
Trade-offs between Output Quality Components	***Trade-offs are the extent to which different aspects of quality are balanced against each other.*** The FE Activity statistical bulletins have a trade-off between timeliness and accuracy. FE Colleges submit their end of year enrolment data to DfE about 2 months after the end of each academic year. DfE gives FE Colleges this time to get their data as 'fit for purpose' as possible and in line with the stringent validation procedures. To enable timely data collection the data collection process allows some tolerance of missing values for certain variables. Final year enrolment data was extracted in mid-October 2018 and the FE Activity statistical bulletin was published in November 2018. There was a period of two months between receiving the final year data and publishing into the public domain.

	This trade-off between timeliness and accuracy allows customers to have information which is as fit for purpose as possible as soon as possible after the period to which it refers.
Assessment of User Needs and Perceptions	*The processes for finding out about users and uses, and their views on the statistical products.*
	In the development of FE publications, DfE statisticians give careful consideration to the needs of its customers. DfE statisticians hold regular meetings with departmental policy officials to ensure that the bulletins are fit for purpose, allowing officials to effectively carry out their role in developing and monitoring policies and FE provision. Contact details for the lead statistician are provided at the front of the bulletin, providing all customers with the opportunity to give feedback or raise issues relating to the publication. Feedback and ad hoc queries received throughout the year are monitored. This influences what analyses are included in the bulletin each year and ensures that the published material continues to be relevant and meets user's needs.
Performance, Cost and Respondent Burden	*The effectiveness, efficiency and economy of the statistical output.*
	All the data in the publication are derived from administrative sources and are captured and maintained regardless of whether the FE bulletin is produced or not. Therefore the cost of production is limited to the staff time that is involved in the bulletin's development and publication. The investment in the production of the bulletin has been of benefit to many stakeholders and has enabled the development and monitoring of FE policy and provision since its outset. Respondent burden on each student is minimal. This is because the information used to produce these statistical bulletins is collected as part of the application and enrolment process.

Confidentiality, Transparency and Security	*The procedures and policy used to ensure sound confidentiality, security and transparent practices.*
	FE College data are supplied to DfE via a secure web-based transfer system created and maintained by the Two College Model Unit within South Eastern Regional College. Data are automatically extracted from an electronic data warehouse, which holds a copy of the FE College data held on NICIS. The enrolment data on NICIS are uploaded every hour to the data warehouse. Data extracted from CMS are transferred to DfE statisticians by placing the file on the DfE server via a secure data transfer process by Fujitsu. This is carried out on pre-arranged dates aligned with the data lift from the FE colleges. Within DfE, the data are held on a secure server, accessible only to DfE FE statisticians. If required, data sharing agreements are used to pass information on to third parties commissioned by DfE to undertake specific FE research. All data presented in the publications are anonymous. A statistical disclosure policy is in place to prevent the potential for identification, for example where data are sensitive, or where there are counts of less than three individuals. A list of individuals who have pre-release access to FE statistics is published on the department's website. DfE statisticians adhere to the UK Statistics Authority's Code of Practice for Statistics.