

May 2011/14

Core funding/operations

Request for information

Response may be required

This document was sent to institutions
in April 2011

This document describes the process we will use when reconciling 2009-10 data returns made to the Data Service with other returns made to HEFCE. It also describes how we use ILR data to inform the widening participation and teaching enhancement and student success allocations for 2011-12.

2009-10 statistics derived from ILR data for the monitoring and allocation of funding in FECs

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2009-10 statistics derived from ILR data for the monitoring and allocation of funding in FECs

To	Heads of further education colleges directly funded by HEFCE
Of interest to those responsible for	Learner data, Funding, Audit
Publication date	May 2011
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Executive summary

Purpose

1. This document describes:
 - how we used 2009-10 Data Service learner data to inform 2011-12 funding allocations
 - how we used 2009-10 learner data to monitor returns made to HEFCE
 - the responses required from colleges to these monitoring processes.
2. This document, with its accompanying appendices, consists of the following information:
 - how we used individualised learner record (ILR) data to inform the 2011-12 widening participation (WP) allocations
 - how we used ILR data to inform the 2011-12 teaching enhancement and student success (TESS) allocations
 - how we used ILR data to inform the 2011-12 partial completion weighting
 - the comparison of Higher Education in Further Education: Students Survey 2009-10 (HEIFES09) with 2009-10 ILR F05 data
 - the comparison of the aggregate return to monitor 2009-10 co-funded employer engagement student numbers (CFEE09) with 2009-10 ILR F05 data.

Key points

3. Our recurrent grants to colleges are almost entirely allocated by formula and informed by data provided by colleges.

4. We use individualised student data submitted to the Data Service to inform some elements of our teaching grant: funding for WP and TESS and the weighting factor for student partial completions. This document explains how we expect to do so for our 2011-12 funding allocations. Alongside this, we are releasing data to colleges, via our extranet, showing indicative outcomes for these elements of teaching grant derived from their 2009-10 ILR data.

5. We also use the ILR data to reconcile against aggregate data returns that institutions have previously submitted directly to us: the HEIFES and CFEE student data returns. This involves reconstructing for all institutions what the original student data returns for the college would have looked like if they had been based on their ILR data: we are releasing these outputs to all colleges via our extranet. Where differences between the original and re-created returns result in significant funding discrepancies, we will select the college to go through a reconciliation process (the 'derived statistics exercise'), which involves explaining the reasons for data differences and, if necessary, submitting amendments to their ILR data. At the end of the process, we will treat the final (amended) ILR data as superseding the original HEIFES or CFEE returns and will implement any consequential funding adjustments for all relevant years (subject to an appeals process where appropriate). This document explains the algorithms we use to reconstruct the HEIFES student data from the ILR return and the processes involved where a college is required to respond to the reconciliation exercise.

6. If we find, either through reconciliations with ILR data, or any data audit, that data do not reflect the outturn position for the year, and that this has resulted in colleges receiving incorrect funding or student number allocations, then we will adjust these accordingly. This is subject, where appropriate, to an appeals process and the availability of our funds.

Data quality

7. We are confident that this exercise continues to improve the data quality of returns to both the Data Service and HEFCE. It also increases our understanding of data quality issues that relate to these returns.

Sections and appendices

8. Sections A to C describe how we will use ILR data for this exercise. The technical appendices describe the algorithms we will use.

Action required

9. We expect colleges to review all the outputs that we have derived from their ILR data, with a view to understanding how their data are used for funding purposes and identifying any possible discrepancies in their ILR or HEIFES data.

Institutions wishing to correct ILR data that affect 2011-12 funding

10. We use 2009-10 ILR data to inform some elements of our teaching grant calculations for 2011-12. If errors are identified in ILR data, colleges may inform us of these errors by submitting an action plan. The timetable for submission of an action plan and sign-off for amendments may be found in paragraph 14.

Institutions required to respond to a reconciliation of 2009-10 student data

11. We will write to heads of colleges, copied to HEIFES contacts specifying whether a response is required to any part of this exercise. Notwithstanding the selection thresholds, we

may also ask for further information from any college about their data, including in respect of any of the comparisons between their ILR and other data returns. This may result ultimately in adjustments to grant, where appropriate.

12. Where a response is required, action plans must be returned by **Friday 20 May 2011**.

13. The final deadline for receipt of amendments to ILR data and overrides to primary derived fields detailed in the action plans is **Friday 3 June 2011**.

Timetable

14. The following timetable shows the critical deadlines for the exercise.

11 May 2011	Deadline for receipt of action plans for colleges wishing to make amendments for their WP and TESS allocations
20 May 2011	Deadline for receipt of final action plans produced by each college required to respond
25 May 2011	Deadline for sign-off for colleges wishing to make amendments for their WP and TESS allocations
3 June 2011	Deadline for submitting amendments and overrides to primary derived fields for each college required to respond
17 June 2011	Final deadline for sign-off for 2009-10 ILR data amendments and overrides to primary derived fields as detailed in action plans for each college required to respond

Introduction

Formula funding: data sources and data assurance

15. Our recurrent grants to colleges are almost entirely allocated by formula according to our expectations of what each college will need for various activities and informed by data provided by colleges. Formula funding ensures we are fair, transparent and efficient in how we distribute grants to colleges.
16. HEFCE has a fixed budget. Our funding methods are therefore designed to ensure colleges receive an appropriate share of this budget, given the nature and level of their activities. To distribute this budget fairly between colleges, we need to check that colleges' activities are reported in a consistent way. So, when we collect information on student numbers, we need to ensure these are reported against common definitions.
17. Further information about how we fund colleges is in 'Guide to funding: how HEFCE allocates its funds' (HEFCE 2010/24)¹.
18. There are three main data returns that we use to inform our teaching grant for further education colleges (FECs). These are:
 - a. The Higher Education in Further Education Students Survey (HEIFES). This return is submitted directly to us and provides aggregate information on the numbers of students. It is submitted by colleges in December each year and reports on the student numbers in the current academic year. This ensures our funding decisions are based on the most up-to-date information available. However, because this is provided in-year, it includes elements of forecasting relating to students' activity up until the end of the academic year (that is, 31 July). We use the HEIFES return to monitor achievement of colleges' funding agreement targets and review funding for the current year and to inform teaching funding for the following year.
 - b. The individualised learner record (ILR) F05. This is submitted at the end of the academic year. We use it to gain information about student characteristics that are used, for example, in our funding allocations for widening participation. We also use it to reconcile against the HEIFES data previously provided to us by FECs. We receive it approximately 12 months after the equivalent HEIFES data. Information about the ILR is available from www.theia.org.uk under ILR.
 - c. The co-funded employer engagement student number (CFEE) return. This return is submitted directly to us and provides aggregate information on the numbers of students that are to count towards employer co-funded student number allocations. It is submitted by institutions in August and reports on the numbers in the academic year just completed. We use it to monitor achievement of targets and review funding relating to employer co-funded provision.
19. Higher education institutions (HEIs) make equivalent student data returns that inform our teaching grants to them. These are the Higher Education Students Early Statistics (HESES) survey (the equivalent of HEIFES) and the Higher Education Statistics Agency student record which is the equivalent of the ILR. Where required, some HEIs will also complete the CFEE

¹ All HEFCE publications are available in full at www.hefce.ac.uk/pubs.

return. We are also empowered to fund research at HEIs, so there are additional research-related data returns that we require of them.

20. We have a number of processes to check the accuracy of colleges' data returns that inform our funding, although the responsibility for the accuracy of these returns rests with the colleges themselves:

a. Validation checks. Most of these are built into the HEIFES workbooks which colleges complete. These ensure numerical consistency within the return (for example that certain figures on one table match figures on another).

b. Credibility checks. Some of these are also built into the HEIFES workbooks and will generate warning messages if certain thresholds are breached. In addition, HEFCE staff carry out credibility checks of all HEIFES data returns and will question colleges about them. Credibility checks will relate to data values or changes that, while possible, appear unexpected or unlikely.

c. Data audit. Data audit tests colleges' systems and processes in preparing data returns. It involves visits to colleges to review their management information systems, the documentation that provides an audit trail showing how the return was produced, and substantial testing of the assumptions underpinning and values reported on the return. This will involve selecting samples of students and testing how they have been reported in the return. We select colleges on a risk basis and this takes account of a number of factors, such as our assessment of risk and the likelihood of data errors leading to financial implications.

d. Data reconciliation. This occurs in the following academic year. We use the student data submitted by the college to the Data Service to reconstruct what the original HEIFES or CFEE student data for the institution would have looked like. We also use it to monitor how institutions assign activity to academic cost centres. Where differences between the original and re-created returns result in significant funding discrepancies, the institution is selected to go through a reconciliation process, which involves explaining the reasons for data differences and, if necessary, submitting amendments to their ILR data. At the end of the process, we will treat the final (amended) ILR data as superseding the original HEIFES or CFEE returns and will implement any consequential funding adjustments for all relevant years (subject to an appeals process where appropriate).

21. This document describes how we will use 2009-10 ILR F05 data to monitor returns made to HEFCE and to inform funding allocations. It also details the action required where either a response is requested or an institution wishes to correct errors in its ILR data.

22. This document consists of this introduction, an executive summary, and Sections A to C (there is more information on the contents of each section in later paragraphs of this introduction).

23. In addition, nine technical appendices will be e-mailed to the HEIFES contacts for each college and published alongside this document at www.hefce.ac.uk/pubs. These appendices will be of interest to readers who need to look at the algorithms used in the calculation of their derived data.

Funding allocations

24. We use 2009-10 ILR F05 data to inform some elements of our teaching grant calculations for 2011-12 and this document explains how we do so. Alongside this, we are releasing data to colleges, via our extranet, showing indicative outcomes for these elements of teaching grant derived from their 2009-10 ILR data.

2011-12 widening participation and teaching enhancement and student success funding allocations

25. We use ILR 2009-10 data to inform the following widening participation (WP) and teaching enhancement and student success (TESS) funding allocations for 2011-12:

- widening access for full-time and part-time students from disadvantaged backgrounds
- widening access and improving provision for disabled students
- improving retention for full-time students.

26. Section B contains details of the derived statistics that inform the 2011-12 WP and TESS allocations respectively.

2011-12 partial completion weighting

27. We use 2009-10 ILR data to inform the calculation of the 2011-12 partial completion weighting, used in our calculations of standard resource. The weighting for each institution will be based on students who non-complete their year but who complete at least 0.16 full-time equivalent (FTE). Section B explains the derived statistics that we expect will inform the 2011-12 partial completion weighing.

Monitoring funding

28. Generally we monitor funding returns made to HEFCE by re-creating these funding returns from ILR data. This exercise is conducted in two interrelated but distinct parts:

- a. The first part is the process of reconciling, explaining and amending the data up to the point where institutions are in a position to sign off a re-creation as a reasonable reflection of the outturn position for the year.
- b. The second part, which occurs after an institution has signed off the re-creation, is the consideration of the final re-creation in terms of any funding adjustments to be made, and, where appropriate, an appeals process.

29. Our monitoring processes are applied consistently to all institutions. We receive ILR F05 data approximately 12 months after the equivalent year's HEIFES returns; and approximately four months after the CFEE return. We expect all institutions to have used the HEIFES and CFEE re-creations generated by the '2009-10 statistics derived from ILR data: Guide to HEFCE web facility' (available at www.hefce.ac.uk/learning/datacoll/derived/webfacility/) to verify and correct their ILR data, where appropriate, before submitting their ILR returns in readiness for this exercise.

30. Our funding allocations are informed by the data provided by institutions. If we find, either through reconciliations with ILR data, or any data audit, that data do not reflect the outturn position for the year, and that this has resulted in institutions receiving incorrect funding or

student number allocations, then we will adjust these accordingly. This is subject, where appropriate, to an appeals process and the availability of our funds.

31. Any funding adjustments arising from:

- the reconciliation of HEIFES09 with a re-creation of HEIFES09 from 2009-10 ILR data (the HEIFES09 re-creation)
- the reconciliation of CFEE09 with a re-creation of CFEE09 from 2009-10 ILR F05 data (the CFEE09 re-creation)

are likely to affect the funding previously announced for 2009-10 and all subsequent years, including targeted teaching allocations for 2010-11.

32. In many cases the funding adjustments arising from the reconciliation may be significant. Therefore it is important for colleges to ensure that sufficient time and resources are allocated to allow the exercise to be completed accurately and promptly.

Selection thresholds and action plans

33. The necessarily complex process of explaining and resolving differences between data sources places a considerable burden on institutions and HEFCE. To ensure this burden is both manageable and appropriate, we employ thresholds to select which institutions must respond to a data reconciliation. For HEIFES and CFEE these thresholds are set in terms of the funding differences arising from the comparisons. This selection process represents a risk assessment, intended primarily to identify, and thus select, those colleges whose data differences are most likely to have a material effect on their funding allocations.

34. We will write to heads of colleges, copied to HEIFES contacts, specifying whether their college's data meet our selection thresholds and therefore whether they are required to respond to this exercise. We will require a full, timely and detailed response from colleges where any of the thresholds in Table A are exceeded:

Table A **Summary table of thresholds**

	Threshold
HEIFES09 re-creation	
Difference in holdback for exceeding the contract range	£450,000
Difference in net grant adjustments relating to ASN funding	£450,000
CFEE09 re-creation	
Difference in funds to be held back	£450,000

35. Each college that is selected to make a response must provide, via the HEFCE extranet, an action plan. The plan must contain specific information before we can approve it and progress with the exercise. Complete and comprehensive action plans allow us to gain a full understanding of the areas of, causes of and reasons for discrepancies. Please ensure you have understood the requirements set out in the 'Guide to action plans' (see www.hefce.ac.uk/learning/datacoll/derived/help/guides.htm) before responding. If we are unable to gain the necessary information from an action plan it is likely that we will need to visit your institution to gather this information.

Re-creation of HEIFES09

36. ILR 2009-10 data will be used to monitor HEIFES09. A re-creation of HEIFES09 is generated from ILR 2009-10 data using the methods detailed in Section C. This re-creation is compared to HEIFES09 and if the discrepancies between the two data sources exceed our thresholds, the college will be required to respond to the exercise. We also generate re-calculated 2010-11 WP and TESS allocations based on HEIFES09 re-creation FTEs which are compared with the 2010-11 WP and TESS allocations based on HEIFES09 FTEs.

Re-creation of CFEE09

37. ILR 2009-10 F05 data will be used to monitor CFEE09. A re-creation of CFEE09 is generated from ILR 2009-10 F05 data using the methods detailed in Section C. This re-creation is compared to CFEE09 and if the discrepancies between the two data sources exceed our thresholds, the college will be required to respond to the exercise.

38. Table B summarises the response required for each of the comparisons, along with the possible causes of differences.

Table B Response process for institutions required to respond

Comparison causing selection	Differences to explain in action plan	Possible causes of differences
HEIFES09 and the HEIFES09 re-creation	All differences between HEIFES09 and the HEIFES09 re-creation	Errors in ILR data Errors/estimation discrepancies in HEIFESS09 Problems of fit with the HEIFES09 re-creation algorithms
CFEE09 and the CFEE09 re-creation	All differences between CFEE09 and the CFEE09 re-creation	Errors in ILR data Errors in CFEE09 Problems of fit with the CFEE09 re-creation algorithms

Confirmation

39. When both the selected college and HEFCE are content that the discrepancies between the data sources are explained and, where appropriate, the necessary action has been taken to remove a discrepancy, we will ask for confirmation that the relevant re-creation reasonably reflects the outturn position for 2009-10.

40. Once we have received that confirmation, we will regenerate all the exercise's re-creations (namely the HEIFES09 re-creation and the CFEE09 re-creation) to incorporate any amendments that have been made to ILR data. We will request a further response for any of these comparisons where the selection thresholds are exceeded, unless the causes for the differences have already been explained. For example, upon receipt of confirmation that the HEIFES09 re-creation reasonably reflects the outturn position for 2009-10, we will ask for a further response for the comparison of CFEE09 and the CFEE09 re-creation, if the threshold for selection to the CFEE09 re-creation has now been exceeded as a result of corrections to ILR data.

41. Once confirmation has been asked for and received for all comparisons where a response is required, any re-creation that has been signed off will supersede its predecessor, and any consequent grant adjustments will be calculated and made, subject to the appeals process where relevant and to the availability of our funds.

42. Appeals against grant adjustments will be invited where these are already an established part of our main funding method. This applies where grant adjustments arise because of the extent to which an institution has met its funding agreement targets for 2009-10 or subsequent years (such as holdback relating to compliance with the contract range or delivery of fully funded or employer co-funded additional student numbers). Appeals will not be invited where there is no equivalent appeals process for our formula allocations derived from the original HEIFES or CFEE returns. This applies, for example, to recalculations of targeted teaching allocations (including for WP and TESS). This approach ensures that colleges are subject to the same treatment irrespective of whether grant allocations or adjustments arise from the original HEIFES and CFEE returns or from their re-creation from ILR data, and that there is no advantage to colleges in submitting incorrect returns.

43. We will be prepared to consider requests from colleges about the repayment period for significant reductions to grant, taking account of both what we consider to be affordable for the college and the desirability of us recovering funding in a timely way.

44. The thresholds we use to select colleges must not be interpreted as being the minimum grant adjustments that we might make. For holdback of teaching grant these are set out in the relevant grant adjustments publication, for example 'HEFCE grant adjustments 2010-11' (HEFCE 2010/22).

Grant adjustments for colleges not required to respond

45. We do not gain assurance through this exercise about the reliability of the HEIFES09 and CFEE09 returns, or of the HEIFES09 and CFEE09 re-creations for colleges that have not been required to respond. For such colleges the re-creations do not supersede the HEIFES09 and CFEE09 returns and as such we would not generally expect to adjust funding allocations based on these re-creations.

Further monitoring

46. We may audit data, systems and processes for institutions that are unable to provide acceptable explanations for the causes of discrepancies in any of the comparisons.

47. Notwithstanding the selection thresholds, we may also ask for further information from any institution in respect of any of the comparisons. This may result ultimately in adjustments to grant, where appropriate.

HEFCE web facility for 2009-10 statistics derived from ILR data

48. On 17 September 2010 we made available the HEFCE web facility for 2009-10 statistics derived from ILR data. This facility is designed to assist colleges in returning accurate data to the Data Service and to identify discrepancies between forecasting in HEIFES09 and the outturn position for 2009-10.

Frequently asked questions

49. Frequently asked questions (FAQs) for this exercise can be found on the HEFCE web-site under '2009-10 derived statistics overview' (www.hefce.ac.uk/learning/datacoll/derived/latest). We encourage colleges to refer to the FAQs for guidance in the first instance. We will only use our e-mail list of HEIFES contacts to notify colleges of significant changes or updates.

Comments and feedback

50. All colleges are invited to comment on any of the methods described in this publication. Comments or feedback relating to any element of this exercise should be e-mailed to ilr_heifes_feedback@hefce.ac.uk.

Section A: Summary of changes

Purpose

51. This section describes the changes introduced since '2008-09 statistics derived from ILR data for the allocation and monitoring of funding in FECs'.

Documentation changes

52. We have reviewed the former 'annexes' section of the document, moving some generic guidance to our web-site (see paragraph 60) and restructuring the document so that it now comprises just three sections:

- Section A Summary of changes
- Section B Indicative funding summaries. This section describes how we use ILR data for funding allocations
- Section C Funding data reconciliations. This section describes how we use ILR data for reconciling data.

Derived statistics area on the HEFCE web-site

53. As part of the review of the 'annexes' documentation we have generic derived statistics guidance onto the HEFCE web-site. This has resulted in substantial development of the derived statistics area (www.hefce.ac.uk/learning/datacoll/derived/).

54. Generic derived statistics guidance previously provided in this document can now be found in the 'Help guides' area (www.hefce.ac.uk/learning/datacoll/derived/help/). Some specific areas that may be of interest are:

- extranet locations, deadlines and documentation can be found in the '2009-10 derived statistics overview' (www.hefce.ac.uk/learning/datacoll/derived/latest/)
- information on how to obtain data from the HEFCE extranet' is in the 'How to access a derived statistics output' guide (www.hefce.ac.uk/learning/datacoll/derived/help/output/)
- guidance for action plans is in the 'Guide to action plans' (www.hefce.ac.uk/learning/datacoll/derived/help/guides.htm)
- processes for correcting data are in the 'How to amend ILR data' guide (www.hefce.ac.uk/learning/datacoll/derived/help/amend/ilr.htm) and the 'How to submit overrides to primary derived fields' guide (www.hefce.ac.uk/learning/datacoll/derived/help/submit/overrides.htm).

Section B: Indicative funding summaries

Purpose

55. This section describes how we expect to use 2009-10 ILR F05 data to inform allocations of WP and TESS funding and the partial completion weighting for 2011-12. Further details of the algorithms that we use on these data are provided in Appendices 7, 8 and 9 respectively.

Derived statistics outputs

56. The 'How to access a derived statistics output' guide (www.hefce.ac.uk/learning/datacoll/derived/help/output/) describes how to access the derived statistics which we have used to inform the 2011-12 WP allocation, TESS allocation and partial completion weighting in an Excel workbook (IHWP09YYYYYY.xls, IHTESS09YYYYYY.xls and IHPCMP09YYYYYY.xls – where YYYYYY is the provider number ST_UPIN (L01) for the college).

57. The derived statistics can, in most cases, be rebuilt from the individualised files which we provide (IHWP09YYYYYY.ind, IHTESS09YYYYYY.ind and IHPCMP09YYYYYY.ind respectively – see the 'How to access a derived statistics output' guide, www.hefce.ac.uk/learning/datacoll/derived/help/output/, for details on how to obtain these files). These files contain details of how each student was categorised in the WP and TESS allocation and partial completion weighting and, where relevant, details of why they did not contribute. Full descriptions of the data in the individualised files are given in Appendices 7, 8 and 9 respectively, along with instructions on how to rebuild the figures in the three indicative funding summary spreadsheets.

58. These indicative funding summary calculations are provided for general information and to provide further transparency about our calculations. They should not be considered as any kind of commitment by HEFCE and are without prejudice to what our Board may agree to be the final allocations for any college. The final figures for 2011-12 may differ from the illustrations given in these outputs, because they may not include the effects of transfers or mergers or subsequent decisions about the funding available or changes to data.

59. We use 2009-10 ILR data to inform some elements of our teaching grant calculations for 2011-12. If errors are identified in ILR data, colleges may inform us of these errors by submitting an action plan.

60. The timetable for submission of an action plan and sign-off for amendments are as follows:

11 May 2011	Deadline for receipt of action plans for colleges wishing to make amendments for their WP and TESS allocations
25 May 2011	Deadline for sign-off for colleges wishing to make amendments for their WP and TESS allocations

WP and TESS funding calculations

61. We have generated an indicative summary of the calculation of 2011-12 WP funding and the improving retention element of 2011-12 TESS funding. The calculations use 2011-12 allocation rates (announced in March 2011) applied to assumed 2011-12 FTEs. They do not

incorporate 2011-12 transfers or mergers. During 2011 we will update the rates and FTEs used for these allocations as more current information becomes available.

62. These funding allocations are informed by the data provided by colleges. If we find that data errors have resulted in colleges receiving incorrect funding allocations, then we will adjust their funding accordingly. In particular, where reconciliations with 2010-11 ILR data or HEFES10 audit highlight that the FTEs used to allocate 2011-12 funding were incorrect, then we will adjust grant accordingly, subject to the availability of HEFCE funds.

Derived statistics that may inform the 2011-12 widening participation (WP) allocation

63. Widening participation funding comprises two elements of grant:

- widening access for students from disadvantaged backgrounds
- widening access and improving provision for disabled students.

Widening access for students from disadvantaged backgrounds

64. This is a formula-based allocation of funding for teaching to recognise the extra costs associated with recruiting and supporting undergraduate students from disadvantaged backgrounds who are currently under-represented in higher education. The calculations are carried out separately for full- and part-time students and the proposed method of allocating funds is as follows.

65. Using postcode information from 2009-10 ILR F05 data, each student is mapped to a 2001 Census area statistics ward. These wards are themselves assigned to quintiles based on young participation rates (for young² full-time students) and quintiles based on the proportion of 16-74 year-olds with a higher education (HE) qualification (for mature full-time, and young and mature part-time undergraduates). Each student is weighted according to the relevant quintile assignment of their ward as shown in Table C:

Table C **Student weighting**

Quintile	Weighting
1 Lowest young HE participation (young full-time) or lowest average adult HE attainment (part-time and mature full-time)	2
2	1
3, 4, 5	0

66. The young HE participation quintiles come from our work on measuring young participation (see 'Trends in young participation in higher education: core results for England', HEFCE 2010/03). For these calculations we use our POLAR2 area classification which is based on young people who reached 18 between 2000 and 2004 and entered a higher education course in the UK while aged 18 or 19³. Young participation rates are calculated for each 2001 Census area statistics ward in the UK and are used to rank the wards into five participation quintiles, each containing 20 per cent of the UK young population for this period.

² 'Young' students are those aged under 21 on entry to their programme of study; 'mature' students are those aged 21 or over on entry.

³ For more information on POLAR2 see www.hefce.ac.uk/widen/polar/

67. The adult HE qualification quintiles are based on 2001 Census area statistics. We use the national equivalents of the 2001 Census Key Statistics table 13 (KS013, 'Qualifications and students') for 2001 Census Output Areas (subsequently aggregated to 2001 Census area statistics wards). These tables can be obtained from the Office for National Statistics (ONS), the General Register Office for Scotland and the Northern Ireland Statistics and Research Agency. We calculate the proportion of 16-74 year-olds with an HE qualification for UK 2001 Census small-area statistics wards. These wards are then ranked by this proportion to give the adult HE qualification quintiles, with each quintile covering 20 per cent of the English 16-74 year-old population.

68. We allocate postcodes to 2001 Census area statistics wards using the August 2007 release of the ONS's National Statistics Postcode Directory (NSPD), supplemented by the May 2010 release for new postcodes added between those two dates. A file containing the allocation of postcodes to young participation and adult HE attainment quintiles is available at www.hefce.ac.uk/widen/polar/. This file includes postcodes which are excluded from the quintile mapping along with the reason for exclusion (including non-geographic postcodes).

69. Part-time and mature students who already hold a higher education qualification at the same level as, or higher than, their current qualification aim, or have unknown entry qualifications, are given a weighting of zero, irrespective of their postcode.

70. We calculate a 'widening access average weight' (separately for full-time and part-time students) as follows:

$$\frac{\text{Total weight for all students in the population}}{\text{Total students in the population}}$$

71. The population is defined as full-time or part-time (as appropriate) HEFCE-funded UK domiciled new entrants that generate a Column 4 countable year in the HEIFES09 re-creation.

72. Some students are excluded from the population that is defined above:

- those with a postcode that has been identified in our young participation analysis as being associated with an unfeasible number of young entrants in relation to our population estimates – typically this would be a postcode relating to a boarding school
- those whose postcode is marked as a non-geographic postcode in the NSPD
- those with a postcode that, although valid, is not mapped to the required Census 2001 geography in the NSPD.

73. These excluded students are counted in the FTEs in the next step (see paragraph 21), and therefore receive an average weight for the purpose of allocating funds.

74. Each average weight derived from paragraph 17 is London-weighted (generally 8 per cent for inner London and 5 per cent for outer London) and applied to the undergraduate (including foundation degree) base FTEs for 2010-11 plus 2009-10 non-mainstreamed FTEs (which will not incorporate 2011-12 transfers or mergers).

Widening access and improving provision for disabled students

75. We also allocate funding for widening access and improving provision for disabled students. This allocation is likely to be calculated using 2009-10 ILR data as follows.

76. Firstly, we calculate for each college the proportion of eligible home and EU students who received the Disabled Students' Allowance (DSA). These proportions are then ranked and split into quartiles. Students are only part of the population if they generate a Column 4 countable year in the HEIFES09 re-creation.

77. Next, each college is assigned to one of four quartiles, according to the proportion of students in receipt of the DSA as calculated in paragraph 23, although this is smoothed to ensure that no college falls by more than one quartile since the previous year. Separate weightings are attached to each of the four quartiles, as shown in Table D. In particular, colleges should note that their quartile may change between years even if the proportion of students in receipt of DSA at their college does not change. This is because changes to other colleges' data may affect their quartile assignment.

Table D Quartile weightings

Quartile	Weighting
A (lowest proportion)	1
B	2
C	3
D (highest proportion)	4

78. Finally, each college's share of the funding is allocated pro rata to the base FTEs for 2010-11 plus 2009-10 non-mainstream FTEs (which will not incorporate all 2011-12, transfers or mergers), weighted according to the quartile in which they fall and a London weighting (generally 8 per cent for inner London, 5 per cent for outer London) although minimum allocations apply depending on total FTE as specified on our web-site under 'Widening access and improving provision for disabled students: funding allocation method for 2010-11' (www.hefce.ac.uk/widen/slidd/1011/allocat.asp).

Derived statistics that inform the 2011-12 TESS allocation

79. TESS funding comprises four elements of grant:

- improving retention for full-time students
- improving retention for part-time students
- research-informed teaching
- institutional learning and teaching strategies.

Only the first two of these elements are included in the derived statistics outputs.

Improving retention: full-time students

80. For full-time undergraduate students, the allocation is based on students' entry qualifications and age, as follows.

81. Using age and entry qualification information from 2009-10 ILR F05 data, full-time UK-domiciled undergraduate new entrants are assigned to one of six risk categories (see Table

F for further information on how students are assigned to risk categories) which are then weighted as shown in Table E. Students are only included in the population if they generate a HEFCE-fundable Column 4 countable year in the HEIFES09 re-creation. We also exclude some UCAS entrants whose highest qualification on entry is an A-level or equivalent (see the note to Table F for further details).

Table E Risk category weightings

	Young	Mature
Low risk	0	0
Medium risk	1	1.5
High risk	1.5	2.5

82. The assignment of students to one of the six risk categories based on entry qualifications and age is shown in Table F below.

Table F Assignment of students to risk categories based on entry qualifications and age

	Young	Mature
Low risk	<ul style="list-style-type: none"> • A-levels/Highers with more than 260 or unknown* tariff points • Baccalaureate • degree or higher • unknown qualifications[†] 	<ul style="list-style-type: none"> • A-levels/Highers with more than 320 or unknown* tariff points • degree or higher • unknown qualifications[†]
Medium risk	<ul style="list-style-type: none"> • A-levels/Highers with between 161 and 260 tariff points • foundation course • other HE qualification (below degree level) 	<ul style="list-style-type: none"> • A-levels/Highers with 320 tariff points or fewer • other HE qualification (below degree level) • foundation course • access course
High risk	<ul style="list-style-type: none"> • A-levels/Highers with 160 tariff points or fewer • BTEC • access course • other qualifications • no qualifications 	<ul style="list-style-type: none"> • BTEC • Baccalaureate • other qualifications • no qualifications

* New entrants whose highest qualification on entry are A-levels or equivalent but who did not enter via UCAS (the universities and colleges admissions body) and who do not have tariff points recorded are allocated to medium risk.

† New entrants with unknown entry qualifications are given a zero weight, and are identified in a separate category in the individualised file and allocations spreadsheet to aid with data checking. Colleges should ensure that highest qualification on entry is recorded to ensure students are to be weighted appropriately in the allocation method for this stream of funding.

83. We calculate a 'full-time improving retention average weight' as:

$$\frac{\text{Total weight for all students in the population}}{\text{Total students in the population}}$$

84. The average weight derived from paragraph 9 is given a London weighting (generally 8 per cent for inner London, 5 per cent for outer London) and applied to the full-time undergraduate (including foundation degree) base FTEs for 2010-11 plus 2009-10 non-mainstream FTEs (which will not incorporate 2011-12 transfers or mergers).

Improving retention: part-time students

85. The part-time allocation is likely to be distributed pro rata to London-weighted (generally 8 per cent for inner London and 5 per cent for outer London) part-time undergraduate (including foundation degree) base FTEs for 2010-11 plus 2009-10 non-mainstream FTEs (which will not incorporate 2011-12 transfers or mergers).

Derived statistics that inform the 2011-12 partial completion weighting

86. We expect to reflect the amount of study completed by those students who did not complete their whole year as a weighting factor primarily derived from 2009-10 ILR data. The weighting takes account of activity completed by students who are reported as non-completions in colleges' ILR submissions.

87. The basis for the weighting is that it should be set at a level that reflects how colleges would have moved relative to the tolerance band if 'partial completions' (that is, those students who do not complete all their initial study intentions for the year) had been included in the teaching funding model for 2009-10.

88. The method step-by-step can be summarised as follows:

- a. **Step 1:** We calculate price group weighted FTEs, standard resource, assumed fee income and assumed resource for each college, using the HEIFES re-creation from 2009-10 ILR data (for details on how to obtain this file see www.hefce.ac.uk/learning/datacoll/derived/help/output/), but excluding the partial completion weighting that applied in that year (it was then known as the 'flexible study measure'). From this, we calculate the percentage difference between standard and assumed resource. The mainstream teaching grant for each college within the assumed resource calculation is the sum of the following items, each of which are taken from the final issue of 2010-11 grant Table C, or as may have subsequently been revised (such as following data audit and reconciliation):
 - i. 2009-10 Mainstream teaching grant
 - ii. 2009-10 Efficiency saving relating to mainstream teaching grant
 - iii. 2009-10 Mainstream grant adjustment (after 2009-10 efficiency saving)

iv. 2009-10 Miscellaneous grant adjustments.

b. **Step 2:** We calculate the additional standard resource and assumed fee income for partially completing students. For standard resource, this takes account of the FTE only of completed modules; for the assumed fee income, this takes account of the FTE associated with both completed and uncompleted modules. We then re-calculate the percentage difference between standard and assumed resource for the college taking account of this extra resource for partial completions.

c. **Step 3:** The weighting is calculated such that when applied to price group weighted FTEs in the standard resource calculation in Step 1, the percentage difference between standard and assumed resource matches that in Step 2.

89. The formulae in these steps can be described as follows:

Variables

Step 1	WFTE1	Price group weighted FTEs from the HEIFES09 re-creation
	STD1	Standard resource based on the HEIFES09 re-creation
	AR1	Assumed resource based on the HEIFES09 re-creation
	BP	Base price
Step 2	STD2	Standard resource associated with 'partially completing' students, where students have completed at least 0.16 FTE
	FEE2	Assumed fee income associated with 'partially completing' students for attempted modules

Formulae

90. In Step 1 we calculate:

$$PDIFF1 = \frac{AR1 - STD1}{STD1}$$

91. In Step 2 we calculate:

$$PDIFF2 = \frac{(AR1 + FEE2) - (STD1 + STD2)}{STD1 + STD2}$$

92. In Step 3 we calculate:

$$\text{STD3} = \frac{\text{AR1}}{(1 + \text{PDIFF2})}$$

$$\text{Weighting} = \frac{(\text{STD3} - \text{STD1}) \div \text{BP}}{\text{WFTE1}}$$

Section C: Funding data reconciliations

Purpose

93. This section describes the process of making a response, where one is required, to the following funding reconciliations:

- comparison of HEIFES09 and the HEIFES09 re-creation
- comparison of the aggregate return to monitor CFEE09 and the CFEE09 re-creation

where the re-creations have primarily been generated from ILR 2009-10 F05 data.

Re-creations

94. We generate each re-creation by applying the algorithms detailed in Appendices 1 and 4 to ILR 2009-10 F05 data to produce derived fields. These derived fields are then aggregated to produce a re-creation of the original funding return. We then produce summaries and comparisons of the main elements of the re-creation against the original funding return and present these in an Excel workbook.

Derived statistics outputs

95. The re-creation outputs can be accessed from the HEFCE extranet. The 'How to access a derived statistics output' guide (www.hefce.ac.uk/learning/datacoll/derived/help/output/) provides details of how to access these Excel workbooks and Appendices 1 and 4 provide details on the workbook contents.

96. All the information contained in the re-creation tables can be rebuilt by categorising and aggregating the data contained in the individualised files which we provide. These files (HEIFER09XXXX.ind and CFEE09XXXX.ind respectively) contain details, in the form of ILR and derived fields, of how each student was classified in the re-creations listed in paragraph 93. Full descriptions of the data in the individualised files are given in Appendices 1 and 4. Full descriptions of how to rebuild the re-creations from the individualised files are given in Appendices 2 and 5.

97. Where available, the 'DIFF' worksheets will indicate where differences in cell totals between the re-creation and funding return tables exceed a given threshold. The size of this threshold can be altered by entering the required value where indicated on the worksheets. These sheets are provided to assist colleges in reconciling differences between the tables.

Action required

98. Where we require a response, an action plan must be submitted via the HEFCE extranet by **Friday 20 May 2011**, detailing how the college will reconcile the two data sources.

Action plans

99. Each college required to make a response will be asked to provide at least one action plan. The plan must contain specific information before we can approve it and progress with the exercise. Please ensure you have understood the requirements for completing and submitting action plans. There is guidance for completing and submitting an action plan in the 'Guide to action plans' (www.hefce.ac.uk/learning/datacoll/derived/help/guides.htm).

100. We expect the explanations that colleges provide for discrepancies between the two data sources to fall into one or more of the following categories:

- errors in ILR 2009-10 F05 data
- errors/estimation discrepancies in the original funding return
- errors in the Learning Aim Database (LAD)
- problems of fit with the re-creation algorithms.

101. The action plan must specify where, and to what extent, each of these three categories contributes to the overall discrepancy.

102. If colleges do not provide satisfactory explanations for discrepancies, or do not respond within the given timescales, we may carry out further investigations. This may include visits to colleges by us or our agents, in order to gain assurances concerning one or more of the following:

- the reliability of data returns
- the understanding of methods used and technology employed to compile data returns
- the ability to respond in a full and timely manner to this exercise.

103. In order to gain these assurances we may need to collect or review data as part of these visits. The 'Model Financial Memorandum between HEFCE and institutions' (HEFCE 2010/19) provides for the cost of such investigations to be deducted from institutions' grant.

Explanations for discrepancies between ILR data and the funding

Errors in ILR data

104. If we find, either through reconciliations with ILR data, or any data audit, that the original funding return does not reflect the final outturn position for the year, and that this has resulted in colleges receiving incorrect funding allocations, the re-creation will supersede the original funding return, and any consequent grant adjustments will be made (subject to the appeals process and the availability of our funds). Therefore it may be necessary for a college to submit an amendment file to us to correct records on the 2009-10 ILR return, which incorporates all necessary amendments to ensure it reasonably reflects the outturn position for 2009-10. The 'How to amend ILR data' guide (www.hefce.ac.uk/learning/datacoll/derived/help/amend/ilr.htm) describes how to submit amendments to ILR data.

105. Where errors are found in ILR data we require colleges to submit to us amendment files, detailing the corrections to be made to the ILR return, but only once these changes have been notified to us through an action plan, and this plan has been approved.

106. The procedures for the quality assurance of ILR data must take place before a college signs off the ILR data as correct. Any resubmission of amendments to 2009-10 ILR data to us after this point must be seen as exceptional.

107. We recognise that ILR returns are necessarily complicated, and that errors may occur in them. However, we expect that if colleges use the HEFCE web facility for 2009-10 statistics derived from ILR data (available on the HEFCE extranet), this will keep the number of amendments to a minimum.

108. We may carry out further investigations where amendments to ILR data contradict our understanding of the broad characteristics of activity at a college.

Errors/estimation discrepancies in original funding return

109. If we find, either through reconciliations with ILR data, or any data audit, that the original funding return does not reflect the outturn position for the year, and this is due to errors or estimation discrepancies, then the re-creation will supersede the original funding return, and any consequent grant adjustments will be made (subject to the appeals process and the availability of our funds). Consequently, it will not be necessary for colleges to submit corrections to the original funding return.

Errors in LAD data

110. Errors in the LAD may be corrected by submission of override files. These should be submitted only where ILR data are correct, but data for a learners' aim on the LAD are erroneous. The 'How to submit overrides to LAD fields' (www.hefce.ac.uk/learning/datacoll/derived/help/submit/lad.htm) provides further detail about these types of errors.

Problems of fit with the re-creation algorithms

111. We do not expect that problems of fit with the re-creation algorithms will fully explain discrepancies that exceed the selection thresholds. However, where a problem of fit between our algorithms and funding return definitions contribute to a discrepancy, an explanation will be required of where the problem occurs, and its impact, through the action plan. In addition, colleges will need to provide a primary derived field override file to enable us to correct the problem of fit with our algorithms for those data affected. For details on how to submit overrides to primary derived fields see the guide 'How to submit overrides to primary derived fields' (www.hefce.ac.uk/learning/datacoll/derived/help/submit/overrides.htm). Returning files according to this guidance is essential to establish an audit trail of data changes, and to ensure that overrides are applied in a timely and accurate manner.

112. Colleges are strongly encouraged to submit overrides prior to the deadline of **Friday 3 June 2011** in order to ensure that, if required, any additional overrides and amendments can be submitted within this time frame.

113. Details of all known problems of fit with each of the funding data reconciliations can be found in the following technical appendices:

- HEIFES re-creation: Appendix 3
- CFEE re-creation: Appendix 6.

Specific issues for the HEIFES09 re-creation

Criterion for undetermined completion status (criterion d)

114. Where a college has exceeded the threshold criterion for students for undetermined completion status, we require an override file to be submitted to correct the primary derived field, HEFCOMP, for those students whose completion status was undetermined (at the point of the ILR submission) which are now known to be non-completions. This is to ensure that the HEIFES09 re-creation is a more accurate reflection of the outturn position for 2009-10. We believe that the completion status of the majority of FUNDCOMP = 3 students should be known by the deadline for submitting overrides for primary derived fields (see the timetable in paragraph

14). Appendix 1 gives further details of the algorithm for HEFCOMP, and Appendix 3 gives fuller details of the approximation in our algorithms for determining completion status.

Further action

115. Revised ILR data, and overrides made to primary derived fields, will be used to reproduce the re-creation. Once all overrides have been processed and the revised 2009-10 ILR data have been incorporated, we will review the re-creation. If we are not content that all discrepancies between the original submission and the re-creation have been reasonably explained, we will ask the college to submit a further action plan to explain any remaining discrepancies between the two data sources. We may also visit colleges to discuss the remaining discrepancies.

116. Once the revised ILR data and all overrides to primary derived fields have been processed, and we are content that all discrepancies between the original return and the re-creation have been reasonably explained, we will ask the college to confirm:

- that the re-creation reasonably reflects the outturn position for 2009-10
- the accuracy of overrides to primary derived fields.

Guidance

HEFCE contact

117. Each college has been assigned a HEFCE contact. This contact will be the primary point of contact throughout the reconciliation process.

Frequently asked questions

118. FAQs for this exercise can be found on the HEFCE web-site under '2009-10 derived statistics overview' (www.hefce.ac.uk/learning/datacoll/derived/latest/). We encourage colleges to refer to the FAQs for guidance in the first instance. We will only use our e-mail list of HEIFES contacts to notify colleges of significant changes or updates.

SAS code

119. We use the SAS programming language to generate all the derived statistics described in this publication. The SAS code we use to do this is on the HEFCE web-site under '2009-10 derived statistics overview' (www.hefce.ac.uk/learning/datacoll/derived/latest/).

Comments and feedback

120. All colleges are invited to comment on any of the methods described in this publication. Comments or feedback relating to any element of this exercise should be e-mailed to ilr_heifes_feedback@hefce.ac.uk.

Deadline for responses

121. Action plans must be uploaded to the HEFCE extranet no later than **Friday 20 May 2011**.

122. The final deadline for sign-off for amendments to ILR data and overrides to primary derived fields, as detailed in the action plan(s) is **Friday 17 June 2011**.

Annex A List of abbreviations

CFEE	Co-funded employer engagement (student numbers)
FAQs	Frequently asked questions
FEC	Further education college
FTE	Full-time equivalent
HE	Higher education
HEI	Higher education institution
HEIFES	Higher Education in Further Education: Students (survey)
HESES	Higher Education Students Early Statistics (survey)
ILR	Individualised learner record
LAD	Learning Aim Database
NSPD	National Statistics Postcode Directory
ONS	Office for National Statistics
TESS	Teaching enhancement and student success
WP	Widening participation