Independent audit of student records – report for HEFCE on London Metropolitan University

20 JANUARY 2009





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- 1.1 HEFCE instructed BDO Stoy Hayward LLP to undertake an independent data audit of student records at London Metropolitan University ('the University').
- 1.2 Within the scope of the audit (see Annex), and following our detailed work (Sections 3-10), our conclusions are:-
 - (a) the data returns cannot be relied on;
 - (b) internal processes and controls are weak;
 - (c) senior managers and governors have not been fully effective;
 - (d) the non-completion rate for full time undergraduate and foundation degree students in 2006/07 was 30% (the University estimate was <3%), which led to an over claim of funding in excess of £15m in 2006/07.



- 2 Summary of key issues
- 2.1 We carried out an independent audit of the student records at the University. The detailed findings are set out in the following sections of this report.
- 2.2 A summary of key issues from each section of the report is set out below.
- 2.3 Assess the strengths and weaknesses of the University's student records system and the reliability of the underlying data
- 2.3.1 There are many weaknesses in the control framework associated with the student records system and as such, there is a risk to the integrity of the underlying data. We do not believe this risk to be fundamental, although the weaknesses are likely to have contributed to errors in HESES06 (3.31.1)
- 2.3.2 Taking into consideration the data audit work we have performed we believe the significant exceptions identified in the HESES06 are as a result of weaknesses in the process of the preparation of the return rather than fundamental errors in the underlying student records data (3.33.2).
- 2.4 Determine and evaluate the system for defining, identifying, capturing, recording and reporting student non-completions
- 2.4.1 The process for developing the SQL code to identify non-completions does not follow good practice in respect of testing. The Planning Office had raised concerns following a review of the code and HESA/HESES recreation (4.8.1).
- 2.4.2 We have reservations over the integrity and robustness of the process and believe that there is a risk that the results will not be accurate (4.8.2).
- 2.5 Compare the non-completion rules and practices with the HEFCE definition as set out in the annual HESES circular. This will include how the University identifies whether students are full-time or part-time for funding purposes.
- 2.5.1 The University states that "It is unarguable that the University has not followed to the letter the application of Funding Council definitions in respect of full-time students. Its returns to the Funding Council contained numbers for which full time funding was claimed and for which less or no funds were due according to a strict application of the stated definition of 'full-time'" (5.4.6).
- 2.5.2 Prior to the HESA 2007-08, the non-completions (FUNDCOMP value) used a field relating to student progression which did not reflect the HESES Regulations for non-completion and as a result, the HESES recreation would not have been a reliable source for the estimate of non-completions (4.1.2).



- 2.6 Undertake a HEFCE-style audit of the resubmitted 2006-07 HESES return. This will extend to price group testing.
- 2.6.1 The responsibilities for the return were clearly defined and the processes for reviewing the HESES06 return were in place. However, given the results of our data audit, and in particular the failure to identify fundamental error in the non-completion rates used (detailed in Section 6.5), it is evident that the processes for compiling, reviewing and authorising the return were not effective (6.1.4).
- 2.6.2 Although the SITS systems is the most reliable source of the data for the HESES06 return, the results of our work indicate that the integrity of the SITS data is not maintained on a timely basis (6.2.10).
- 2.6.3 The forecast additions were not an accurate estimation of students who have commenced studies between 2 December and 31 July in any year (6.4.6).
- 2.6.4 The number of non completions on BDO's interpretation of the HESES Regulations (Basis 1 (6.5.12)) for full time undergraduates and foundation degree students ranges from 37% to 48% whereas the university estimated non completions at less than 3% (6.5.19).
- 2.6.5 On Basis 2 (6.5.13), the range is 22%-37%.
- 2.6.6 The difference between Basis 2 and the assumptions in the HESES return (6.5.19) for 2006/07 created an over claim of funding in excess of £15m for the university (6.5.24).
- 2.6.7 The University's HESA05 FUNDCOMP value for a student used a field relating to student progression that did not reflect the HESES Regulations on non-completion and as a result, the HESES05 recreation is not a reliable source for the estimate of non-completions (6.5.21).
- 2.6.8 Based on our work using students who are completions the FTE value for FD & UG is overstated by 4% and PGT is understated by 9% (6.6.5).
- 2.6.9 The University's process to determine the mode and fundability status of courses is not effective (6.12,5).
- 2.6.10 64 students were included in the HESES06 return as fundable but, as they were not in the HESA 2006-07 return, they should not have been included in the HESES06 as fundable students (7.1.2).
- 2.6.11 Based on the HESA return and analysis there were 101 full time and 82 part time students included in the HESES06 return in error (7.2.3).
- 2.6.12 Of these, there were 120 students recorded in the HESA 2006/07 return had left prior to 1 December 2006 per the HESA return (7.2.4).



- 2.6.13 As HESA and HESES used SITS as the primary source of data this error is either caused by delays in recording the date a student left within SITS or the data extract for the HESES06 return failed to identify a student to be excluded from the HESES06 fundable population (7.2.5).
- 2.6.14 There is evidence that a significant number of the 306 full time students (7.3.2) had a mode recoded in HESES which did not reflect the actual mode of study (ie part time). Of the 496 part time students (7.3.6), a significant number were effectively studying full time (7.3.13)
- 2.6.15 There were 112 full time and 54 part time students incorrectly included in the HESES06 return as home fundable (7.4.4).
- 2.6.16 There were 846 full time and 434 part time students included in the HESES06 return in column 1 that should have been included in column 2 per HESA 2006/07 derived data. There is a risk that these students may have been included in column 1 and column 2, however we have been unable to confirm the likelihood of this at the time of writing this report (7.7.5).
- 2.7 Assess the preparation, assumptions and accuracy of the 2007-08 HESA student return, which the University will need to submit in October.
- 2.7.1 In the last week of November we were made aware that the University had just submitted its 2007-08 HESA return but was concerned that there were significant errors in the return (8.1.1).
- 2.7.2 We have no confidence in the return that was submitted in November 2008 (8.15.1).
- 2.7.3 We cannot conclude on either the accuracy or integrity of the HESA 2007-08 return submitted on 4 December 2008 although we note that the non-completion rates are comparable to those determined by our data audit work (8.15.2).
- 2.7.4 In order to assess the accuracy of the HESA 2007-08 return we recommend that some detailed substantive testing be performed on the underlying HESES data (8.15.3).
- 2.8 Assess the extent to which the findings of 2003-04 and 2004-05 HESES data audits were acted upon.
- 2.8.1 Following the HESES 2003-04 and 2004-05 data audits, insufficient work has been done by the University to ensure the integrity of the subsequent HESES and HESA returns (9.23.9).



- 2.9 Identify the audit trail behind the key decisions taken by the university on non-completions issues over the last five years, including how its HESES estimates were arrived at, and summarise the evidence
- 2.9.1 The University was operating blindly with non-completions running at a rate of 43% in the undergraduate and foundation degree student population in 2006/07 and key decisions were being made in the absence of solid facts (10.2).
- 2.9.2 It is clear that the financial assumptions on revenue were fundamentally flawed in 2006/07 and, it follows through clawback and a rebasing of core funding, for 2007/08 (10.5).
- 2.9.3 Management has taken critical decisions on funding that should have been discussed at Board level as they have a material impact on the University (10.7.5).
- 2.9.4 Governors have not properly pursued this and should have done so (10.7.7).
- 2.9.5 As the estimate of non-completions was significantly understated, more than £15m of funding was incorrectly claimed in the University's HESES 2006/07 return (10.9.3).
- 2.9.6 The difference between the University's estimates on non-completion and the reality fundamentally undermines the credibility of management's forecasting and consequent budgeting arrangements (10.9.6).
- 2.9.7 There is a fundamental incompatibility between the way the University was planning its affairs and the funding rules. Nowhere in the board papers have we seen representation from the designated officer providing sufficient information to the Board to enable the Board to take reasonable decisions to ensure that the University planned its affairs so as to remain solvent (10.10).
- 2.9.8 We are concerned that the Vice Chancellor and responsible officers in his executive team, over a prolonged period, have not established a reliable base on which to properly plan the budgets and operations of the institution and advise the governors in accordance with the funding rules and brought these issues to the attention of governors (10.11.2).
- 2.9.9 HEFCE should consider whether the data quality, internal control and financial management at LMU constitute breaches of the FM (10.17).



- Assess the strengths and weaknesses of the University's student records system and the reliability of the underlying data
- 3.1 The fields within the Student Records System that impact the HESA 2007-08 return have been documented but at the time of our work this document had not been finalised and approved. Without a formalised and approved mapping of SITS fields required for the HESES and HESA returns there is a risk that a consistent approach may not be applied and additionally there could lead to delays in producing the returns.
- 3.2 Although, at the time of our review, it is felt that the Academic Registry department owns the student records system, staff are not aware of a document that formally named the SITS system owner. If ownership is not formally defined for a system, there is a risk of a lack of accountability.
- 3.3 Policies and procedures relating to the management and administration of student records exist.
- 3.4 At the time of our review we were advised that there is no formal documentation for the student records system which identifies data classes and access restrictions associated with that data and as such, there is a risk of users having access to data which may be inappropriate for them. We have subsequently been advised that this documentation does exist, but we have not seen any evidence to establish whether it allocates classes of data to specific groups of users
- 3.5 There are controls in operation to ensure student data is captured completely and accurately at the enrolment stage.
- 3.6 We inquired as to whether student records are subject to routine reconciliation and validation against reliable baseline data and other inter-dependent systems but were not provided with sufficient information by the University to conclude that this is the case.
- 3.7 Data exception reports and logs of changes to key data fields are not proactively reviewed on student data and there is a risk that incorrect changes to student data may not be identified in a timely manner.
- 3.8 Students are not required to positively confirm that they intend to study the modules within their programme of study.
- 3.9 Although there are controls to ensure the results of assessments are completely and accurately recorded, the controls are passive in nature.
- 3.10 Audit logs are not actively monitored for the student record system and there is a risk that unauthorised access attempts or data changes may not be identified in a timely manner.



- 3.11 Although students have the facility to review their personal data on SITS and request it to be corrected, they are not required to positively confirm the accuracy of all relevant data.
- 3.12 Reports are created that assist in the identification of duplicate and erroneous data, however there is no process to regularly review and follow up exceptions.
- 3.13 The online data entry screens have guidance available and validation to assist the student in submitting the correct information.
- 3.14 Controls exist to validate the data captured as part of the online enrolment process.
- 3.15 Controls have been designed to safeguard the underlying SITS database from the threats associated with having an online internet presence.
- 3.16 Updates via the web interface (ie using Evision) are made directly to the live database. The client server application can only be accessed from within the University network and MISline and Eureka provide read only access.
- 3.17 Documentation of interfaces was requested but not provided to us.
- 3.18 Controls have been designed to monitor the interface between SITS and the finance system but we have not seen them in operation.
- 3.19 Security and acceptable use policies exist however; there is no formal IT induction or training to educate new members of personnel on University IT policies. If users are not formally made aware of policies this increases the risk that a user is not aware of the policy and hence may not abide by it.
- 3.20 Authentication controls to the SITS and related systems are in operation however, the maximum password age is longer than we would expect. The longer a password is in use, the greater the risk it will be compromised.
- 3.21 Controls over user modifications to user access privileges are in operation.
- 3.22 There are no formal periodic reviews of user access. If access permissions are not reviewed periodically, there is a risk that users could have access to data that is not appropriate for their job role.
- 3.23 Controls over creating and maintaining temporary user access privileges are in operation.
- 3.24 Controls over direct access to the SITS database are in operation.
- 3.25 Controls are in operation to monitor the database integrity of the SITS database.
- 3.26 Controls exist to protect against the external and internal threat of system hacking and inappropriate use.
- 3.27 Controls exist to monitor for unauthorised user activity.



- There is no formalised approach to change management and as a result, there is a 3.28 risk that an inconsistent approach will be applied to different changes. Additionally this could result in software modifications containing errors to be migrated to the production environment.
- At the time of our review, we were advised that there is no record of testing or approval of testing for SITS upgrades. If a formal and controlled approach to application patch management is not followed, there is a risk that unexpected errors may occur and system vulnerabilities may be introduced. The University later submitted that this does exist, but we have not seen any evidence to establish whether appropriate controls over testing and approval are in operation

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3.31 Overall conclusion

- 3.31.1 There are many weaknesses in the control framework associated with the student records system and as such, there is a risk to the integrity of the underlying data. We do not believe this risk to be fundamental, although the weaknesses are likely to have contributed to errors in HESES06 (Sections 6&7).
- 3.31.2 Taking into consideration the data audit work we have performed we believe the significant exceptions identified in the HESES06 are as a result of weaknesses in the process of the preparation of the return rather than fundamental errors in the underlying student records data.



- 4 Determine and evaluate the system for defining, identifying, capturing, recording and reporting student non-completions
- 4.1 Obtain documentation from the University defining what is classified as a noncompletion with respect to the HESES and HESA returns
- 4.1.1 The HESES returns use non-completion rates from the previous HESA recreation of a HESES return.
- 4.1.2 Prior to the HESA 2007-08 the non-completions (FUNDCOMP value of 2= Did not complete the current year of programme of study) used a field relating to student progression which did not reflect the HESES Regulations for non-completion and as a result the HESES recreation would not have been a reliable source for the estimate of non-completions.
- 4.1.3 The University does not have its own document defining non-completions.
- 4.1.4 The University has used a document prepared by HEFCE officers, dated 11 April 2008, together will appendices from the University that were developed as the HESES05 Data Audit was performed as the basis for identifying non-completions for the purposes of HESA 2007-08 return.
- 4.1.5 HESA 2008-09 is expected to have new processes and definitions.
- 4.1.6 The University states that the document had been agreed by HEFCE and LMU 'at the highest level'.
- 4.1.7 The Director of Academic Administration informed us that the policy on non-completions went to the University's Board on 21 May 2008 and to the Audit Committee on 23 July 2008.
- 4.1.8 Elements of the document, which are relevant for determining the completion status of a student, are detailed below:-

Background

"3. It is not expected that these approximations would be used in perpetuity although it is recognised that they may be needed for the upcoming HESES08 and 2007-08 HESA returns. The University should ensure that suitable systems are in place for HESES09 and the 2008-09 HESA student return at the latest."



Modular provision with component marks

- "12 Students at the University have considerable flexibility over their study patterns. However, students are pre allocated modules for the first semester of their first year. There is also a system to allocate modules to students who make no explicit choices. Therefore, it is not always clear from the data held on SITS whether a student intended to take a particular module or whether this was simply allocated to them. In order to address this issue a student was considered to have intended to take a module if any of the following were true:
 - A component mark existed
 - Course work had been submitted
 - Evidence of attendance existed."
- "14 SITS does not identify the final component of individual modules. It was not practical to determine this precisely in the time allowed for this review work. Therefore the following hierarchy to identify final component was agreed:
 - Exam: where a module had two exams the one with the largest component value was taken
 - Where there were no exams, the component with the latest due date, where a module had two components with the same latest due date the one with the largest component value was taken"
- "16 It was agreed that in order to meet HEFCE's definition of full-time, students would need to complete at least 90 credits. Thus full-time students who failed to complete 90 credits would be included as non-completions."
- "18 Students who met any of the following criteria were counted as non-completions:
 - Full-time students who had completed less than 90 credits,
 - Students who had completed less than 120 credits and had any module with which they had engaged recorded as not completed.
 - Students who had no modules completed,
 - Students who had a grade only module that was not completed."

Students on non modular provision

"22 The categories are given in Table 1 below. For each category HEFCE determined the expected completion status for the student on the module. Given the limited data available the University expressed concern that the expected completion status could be counting as non-completion a significant number of students who had in fact completed their year of programme of study. Given the



University's concerns a second "generous" completion status was drawn up and given to the University for consideration.

Attendance	Exam	Expected completion	Generous completion
Complete	Not expected	No	Yes
Complete	Unknown	No	Yes
Complete	Pass	Yes	Yes
Complete	Fail	Yes	Yes
Complete	Deferred	Yes	Yes
Complete	Withdrawn	No	No
Some	Not expected	No	No
Some	Unknown	No	Yes
Some	Pass	Yes	Yes
Some	Fail	Yes	Yes
Some	Deferred	Yes	Yes
Some	Withdrawn	No	No
Blank	Not expected	Ignored	Ignored
Blank	Unknown	No	Ignored
Blank	Pass	Yes	Yes
Blank	Fail	Yes	Yes
Blank	Deferred	Yes	Yes
Blank	Withdrawn	Ignored	Ignored
Withdrawn	Not expected	No	No
Withdrawn	Unknown	No	No
Withdrawn	Pass	Yes	Yes
Withdrawn	Fail	Yes	Yes
Withdrawn	Deferred	No	No
Withdrawn	Withdrawn	No	No
Not expected	Unknown	Ignored	Ignored
Not expected	Pass	Yes	Yes
Not expected	Fail	Yes	Yes
Not expected	Deferred	Yes	Yes
Not expected	Withdrawn	No	No
Not expected	Not expected	Ignored	Ignored

"25 Due to the revisions to HESES07 introduced by the Council the University is concerned that adjusted 2005-06 student records may not be so readily useable for estimating non-completion in 2007-08. HEFCE have agreed that in the first instance completed fundable FTE will be derived by applying growth factors derived from HESES06 and HESES07 to establish the 2006-07 outturn position."



- 4.2 Identify the algorithms, queries and reports used to identify the students that would be classified as non-completions per the University's definition.
- 4.2.1 Data for the majority of the HESA return is built using SITS standard functionality. This is not true for the determination of the non-completion (FUNDCOMP) which requires data to be manipulated using SQL (hesa_fundcomp07.sql). This SQL routine uses a number of temporary tables to establish whether a student had intended to take the module, and if so, identify the final assessment, then determine if the student had undertaken the final assessment in order to assign a value to the FUNDCOMP field.
- 4.2.2 The result of the query requires no manual interaction, with the results of the SQL routine being merged with the SITS table storing the HESA extract.
- 4.2.3 A copy of SQL query was received from the University on 2 December 2008 but we noted that the University had concerns over the accuracy of the HESA return and that a request was to be submitted to HESA to resubmit data.
- 4.2.4 We received the revised SQL code on 19 December 2008 together with a document describing the logic. From a high level review, the code represents the rules described in section 6.5.13.
- 4.3 Identify the sources of data for the algorithms, queries and reports used to identify the students that would be classified as non-completions per the University's definition.
- 4.3.1 The source of the data is the SITS system.
- 4.3.2 The data used relates to the module information for each SCJ (Student Course Join) record. This will include the following in respect of HESA 2007-08.

Modules recorded against student

For each module component

- Mark
- Course work submitted
- Attendance

For modules where any of the above is true, the final component is identified using

- Exam sequence number
- Component last due date
- Component sequence number
- Exam mark
- Component mark



- 4.4 Identify the development controls over changes to the algorithms, queries and reports used to identify the students that would be classified as non-completions per the University's definition
- 4.4.1 There are no specific development controls in place for the development of the SQL queries and manipulation.
- 4.4.2 There is no specific test data to confirm that the algorithm deals with the various scenarios. The algorithm is run against a copy of the live data set and checking is performed at the various stages. With this approach there is a risk that not all errors within the SQL code will be identified.
- 4.4.3 We observed how the testing was performed. A copy of student data is held within the test system. An element of the code is executed and the output is noted. A data element is changed which is expected to change the code output for a selected student. The code is executed again and the output reviewed to ensure the change was as expected.
- 4.4.4 The results of the SQL testing is not documented so it is not possible to determine whether all data variations have been tested to ensure the result of the algorithm is correct.
- S40(2) 4.4.5 The planning office will review the SQL query and will approve it; this is ultimately by
- 4.4.6 Following a review of the SQL code by the semail of 21 November 2008 moted "there was a significant chance of problems with the coded definitions and categorisations due to unexpected results in reports such as HESES/HESA reconciliation". The also noted that the had no suggestions for amendments to solve the issues prior to when the HESA was to be submitted.
- conducted a further review of the revised SQL code. In noted, in an email of 4 December 2008, that although there were no problems found with the revised code and that the revised code went some way to confirming and abating the concerns previously raised. It also noted that the time available for review had been extremely limited.
 - 4.5 Identify the tools used to assess the data quality of the fields used to assess noncompletion status and process for following-up unexpected results.
 - 4.5.1 There are no specific tools used to review the data quality of the fields used to assess non-completion. There is a manual review of the output at each stage of the algorithm that will result in a question on the inputs where there is an unexpected outcome. This review is not documented.



- 4.6 Identify the tools used to assess the data quality of the non-completion status recorded and the procedure for following-up unexpected results.
- 4.6.1 The primary tool used to assess the data quality is the HESES recreation routine provided by HEFCE. The values are reviewed for reasonableness and compared to previous years. Due to the change in the way that non-completions are determined, this will not be a valid way to assess the quality of the algorithm for determining non-completions.
- 4.6.2 We have requested to walk through the process of reviewing the HESES07 recreation. The University has not made this available to us (Section 8).
- 4.7 Identify how the results are incorporated in to the HESA and HESES returns.
- 4.7.1 The HESA extract is created within the SITS system and held in a specific table within the SITS database. The result of the algorithm updates the FUNDCOMP field for a student within this table. The FUNDCOMP field do not exist in the operational modules of the SITS system.

Using the HESA 2007-08 data, HESES07 has been recreated. Detailed below are the non-completion rates.

Level	Mode	Non- completion
FD	FTSW	28.08%
UG (excl. FD)	FTSW	27.62%
PGT	FTSW	20.18%
FD	PART	52.17%
UG (excl. FD)	PART	40.71%
PGT	PART	19.90%

4.7.2 The results for the HESA 2007-08 will form the basis of the estimate of non-completions for the HESES08.

4.8 Conclusion

- 4.8.1 The process for developing the SQL code to identify non-completions does not follow good practice in respect of testing. The Planning Office had raised concerns following a review of the code and HESA/HESES recreation.
- 4.8.2 We have reservations over the integrity and robustness of the process and believe that there is a risk that the results will not be accurate.



- Compare the non-completion rules and practices with the HEFCE definition as set out in the annual HESES circular. This will include how the University identifies whether students are full-time or part-time for funding purposes.
- 5.1 HESES 2006 (covering the funding year 2006/07) defines non-completion as:-

"Non-completion is defined in terms of modular programmes of study. It applies to all institutions, including those that may not consider their programmes to be modular. For HESES purposes a module is taken to mean a discrete component within a programme of study, sometimes referred to as a unit, 'course' or option. Where a student is studying a number of modules that can all count towards the same qualification then this should be treated as a single programme of study.

A student who fails to complete (that is, undergo the final assessment of, or pass) any module within the year of programme of study is to be returned as a non-completion for all activity in that year. However, an exception is allowed for full-time students where the module is in addition to the standard requirements for full-time study."

5.1.1 HESES 2006 also defines how students are classified into mode:-

"Students are classified into full-time and sandwich, sandwich year-out or part-time according to the definitions in Annex I. Students following the same course with the same pattern of activity should generally be returned with the same mode.

- Full-time and sandwich students will be on a course where they are usually required to attend for at least 24 weeks, 21 hours a week, for the year of programme of study; and a full-time fee is chargeable for the year (even if it is waived for some individuals).
- Sandwich year-out students are those on sandwich courses, as defined in Regulation 2 (6) of the Education (Student Support) Regulations 2006 (SI 2006 No. 119), as amended, who are on their year out.
- Part-time students are all other students. Note that this includes HNC students who are expected to complete in one year, but whose course is not subject to regulated fees."



- 5.2 The University defines modes of study in its Academic Regulations. For 2006/07 these included:-
 - (a) "A full-time programme of study shall normally comprise 4 modules in a semester (8 modules in an academic year). Exceptionally and with the approval of the Director of Undergraduate Operations or nominee a full-time programme of study may comprise no fewer than 6 modules in an academic year or no more than 5 modules in each semester (10 modules in an academic year). Such arrangements exclude transferred credit.
 - (b) A part-time programme of study shall be one comprising no more than 6 modules in an academic year and no more than 3 modules in a semester".
- 5.3 On progression (undergraduates) from one year to the next, the Academic Regulations specify:-
 - (a) A student shall be deemed to have completed the requirements of the Certificate level when he or she has:
 - undertaken the assessment for modules equivalent to 120 credits at Certificate level achieving a mark of at least 25% in each module (see Regulation 8 above) and
 - achieved passing marks in at least 90 credits of these modules including any required by the course regulatory schedule to be passed (see Regulation above).
 - (b) A student will be deemed to have completed the requirements of the Intermediate level when he or she has:
 - satisfied the requirements at Certificate level (see Regulation above)
 - undertaken the assessment for additional modules equivalent to 120 credits specified for study at the Intermediate level of the course, achieving a mark of at least 25% in each module (see Regulation 8 above) and
 - achieved passing marks in at least 6 (90 credits) of these modules, including any required by the course regulatory schedule to be passed (see Regulation 6 above).



- 5.4 The University submitted a paper for consideration of these issues to BDO on 24 October 2008. Within the paper the University noted a number of issues including:-
- 5.4.1 "At the commencement of the discussions arising from the 2005/06 audit HEFCE wished to apply its rules [HESES requirements] in full. A full-time student for funding purposes was one who had undergone a final assessment in all modules (8) in an academic year. Conversely, a student recorded as full-time who failed to submit or attend a final assessment on any module is considered to be a non-completion for ALL activity in that year".
- 5.4.2 The paper goes on to say. "This had not been the University's view of the meaning of the rules. HEFCE has since (2007) modified its view and accepted that in fact under London MetUniversity Regulations students attempting assessment in 6 modules can be counted as full-time".
- 5.4.3 "The definition by HEFCE in respect of full time eligibility has remained similar in each circular [HESES guidance] since 1999. Refinements have not materially affected the thrust of a requirement to attempt assessment in all modules".
- 5.4.4 "The HEFCE audits of the 2003-2005 era did <u>not</u> identify failure to adhere literally to the non-completion definition as an issue. It was in their [HEFCE's] terms of reference, the University made clear its practice in documentation and HEFCE were alerted specifically in advance of the 2004 about our practice".
- 5.4.5 "The fact that it was not raised entitles the University reasonably to place reliance on its practices as acceptable to HEFCE under their rules".
- 5.4.6 The University states that "It is unarguable that the University has not followed to the letter the application of Funding Council definitions in respect of full-time students. Its returns to the Funding Council contained numbers for which full time funding was claimed and for which less or no funds were due according to a strict application of the stated definition of 'full-time'".
- 5.4.7 HEFCE has since challenged a number of these statements as misrepresenting the position.
- 5.5 The University did not seek legal advice on their interpretation of requirements.
- 5.5.1 Prior to the HESA 2007-08 the non-completions (FUNDCOMP value of 2= Did not complete the current year of programme of study) used a field relating to-student progression which did not reflect the HESES Regulations for non-completion and as a result the HESES recreation would not have been a reliable source for the estimate of non-completions (4.1.3).



- Undertake a HEFCE-style audit of the resubmitted 2006-07 HESES return. This will extend to price group testing. Part I Responsibilities and processes for compiling the return
- 6.1 Responsibility for Return
- 6.1.1 The HESES06 return used data extracted from the SITS system using SQL queries.

 The SQL queries were written by who also performed the extract. This SQL code was reviewed by a member of the Planning Office to ensure its accuracy.
- 6.1.2 The return was compiled by the Planning Office team and reviewed by who submitted the initial return on 11 December 2006.
 - 6.1.3 The initial return underwent a final review between its submission and the deadline for the final submission on 11 January 2007. The final return was authorised by the Vice-Chancellor who had ultimate responsibility for the return, with guidance from

\$40(2)

- 6.1.4 The responsibilities for the return were clearly defined and the processes for reviewing the HESES06 return were in place. However, given the results of our data audit, and in particular the failure to identify fundamental error in the non-completion rates used (detailed in Section 6.5), it is evident that the processes for compiling, reviewing and authorising the return were not effective.
- 6.2 Overview of Source of Data for the HESES06 Return
- 6.2.1 The primary source of the HESES data was the SITS Student Records System which was updated in the normal course of operations.
- 6.2.2 The process for preparing the HESES return commenced when the HESES Regulations were received. A meeting was arranged with Academic Administration, Information Systems and Services and the Planning Office to discuss what had changed with respect to the HESES return, specifically considering details of changes are outlined in the HESES Regulations. The group also considered any issues encountered during the pervious returns. A University specific HESES spreadsheet is received from HEFCE, which is used to compile the return.
- 6.2.3 Field values from SITS that did not meet the HESES requirements were identified so that SQL code could be developed to replace the SITS values with HESES acceptable values. This SQL code was reviewed by a member of the planning office team to ensure its accuracy.



- 6.2.4 The HESES extract was not a standard function within SITS, but was developed by the University. The HESES data extraction has been stored in an archived table, with all student data is extracted with a flag to identify whether the student forms part of the HESES return or is excluded.
- 6.2.5 The forecast values for additions are based on the HESES05 recreation, supplemented by enquires made from the department heads and a review of applications being processed. Specific work on this is detailed in Section 6.4.
- 6.2.6 The initial source of the forecast non-completions was the HESES05 recreation. The limitation with this approach is the assumption that the non-completion rate in the previous return was accurate. In the case of the University, they had been using a progression code to determine the non-completion status of a student that was not in accordance with the HESES Regulations. Specific work on this is detailed in Section 6.5.
- 6.2.7 The part time load factor is based on the HESES05 recreation. Specific work on this is detailed in Section 6.6.
- 6.2.8 The rates for all three of these (on the rebuttable assumption that they are accurate) are expected to be reasonably stable so any significant changes should be investigated.

	6.2.9	The initial return was submitted by	on 11
		December 2006. The return was then further reviewed	
S40(2)		and the final submission made on 11 January 2007. The final	HESES06
		return was authorised by the Vice-Chancellor who has ultimate respons	
		the return, with guidance from	,

- 6.2.10 Although the SITS systems is the most reliable source of the data for the HESES06 return, the results of our work indicate that the integrity of the SITS data is not maintained on a timely basis.
- 6.3 Agreement of Column 1 with Source Data
- 6.3.1 We requested the student data supporting and reconciling to the total student numbers by level, mode and fundability included in column 1 of tables 1a and 3 of the HESES06 return from the University. The data was supplied to us via HEFCE's data transfer facilities in an Excel file "25806_ata for audit of LondonMet HESES 2006 by BDO Stoy Hayward.xls".
- 6.3.2 The data provided was imported in to our data interrogation software and was summarised on FUNDABILITY_STATUS, MODE AND LENGTH. The totals from the summaries were agreed to the totals for all price groups on the HESES06 return provided by HEFCE.



6.3.3 The source data provided by the University for Column 1 of tables 1a (Full-time and sandwich) and table 3 (Part-time) agreed to the HESES06 totals for all price groups.

6.4 Forecast Additions

- 6.4.1 The initial source of the forecast additions was the HESES05 recreation. However, there were a number of other elements considered when determining the estimate, which were as follows:
 - enrolments from the previous year were considered in terms of course, mode and format
 - planning office requested Heads of Department to confirm whether the additions in the previous year were expected for the HESES return being prepared. The expectation is that Heads will take an optimistic view
 - planning office also reviews the student applications being processed
- 6.4.2 We reviewed the work papers relating to the forecast additions and there was evidence of the above process taking place in the form of emails to and from department heads confirming and/or revising amounts. However, the work papers to support the values for additions in the HESES06 return could not be located at the time of our work.
- 6.4.3 From a review of the HESES06 documentation, students with a commencement anniversary between 2 December and 31 July are not included in column 2 of the relevant table.
- 6.4.4 To review the accuracy of the forecast additions we used the HESA 2006-07 data. We extracted students where they are HEFCE funded (FUNDCODE=1) and their commencement date was between 2 December and 31 July in any year.
- 6.4.5 The data is summarised below.

		FT per HESES06	PT Per HESES06	FT Per HESA 2006-07	PT Per HESA 2006-07	Difference FT	Difference PT
Standard	UG	148	2,585	944	1,437	-798	1,148
	PGT	20	445	6	237	14	208
Long	UG	-	2		-	-	2
	PGT	25	481	94	405	-69	76
		193	3,513	1,046	2,079	-853	1,434



6.4.6 The forecast additions were not an accurate estimation of students who have commenced studies between 2 December and 31 July in any year.

6.5 Estimate of Non-completions

- 6.5.1 The source data for forecast non-completions was the HESES05 recreation. As the estimate of non-completions is done at institution level, no other elements form part of the process.
- 6.5.2 We reviewed the work papers and they support the non-completion values included in the HESES06 return.
- 6.5.3 The HESA05 FUNDCOMP values used a field relating to student progression which did not reflect the HESES05 Regulations for non-completion and as a result, the HESES05 recreation is not considered a reliable source for the estimate of non-completions for HESES06.
- 6.5.4 The non-completion rates were applied to each row in the HESES06 return based on the HESES05 recreation, with the rates summarised below:

Level	Mode	Non- completion %
FD	FTSW	2.39%
UG (excl. FD)	FTSW	2.53%
PGT	FTSW	2.25%
FD	PART	6.52%
UG (excl. FD)	PART	2.11%
PGT	PART	1.44%

Non-completion Testing - Method

- 6.5.5 We requested the student data supporting and reconciling with the total student numbers by level, mode and fundability included in column 1 of tables 1a and 3 of the HESES06 return from the University. The data was supplied to us via HEFCE's data transfer facilities in an Excel file "25806_ata for audit of LondonMet HESES 2006 by BDO Stoy Hayward.xls".
- 6.5.6 The data provided was imported in to our data interrogation software and the HEFCE funded students identified. Following the agreement of a summary of the data to HESES06, HEFCE fundable students were extracted using the criteria FUNDABILITY_STATUS="E".



6.5.7 We concluded that in order to test the non-completion rates the population should be divided in to a number of sub-populations. The sub-populations, together with the number of funded students are detailed below:

Level	Mode	Course Block	HEFCE funded students	Planned sample
Undergraduates & FD	FTSW	0 and 1	5,448	164
Undergraduates & FD	FTSW	2	3,887	117
Undergraduates & FD	FTSW	3, 4, L and S	2,329	70
Undergraduates & FD	PART	0 and 1	2,544	77
Undergraduates & FD	PART	2, 3, 4, L and S	1,584	57
Postgraduates	FTSW	All	1,111	57
Postgraduates	PART	All	1,647	57
			18,550	599

- 6.5.8 Sample sizes were determined using 95% confidence rates, a 0% fail rate and a 5% tolerable error. However, where the sample size was less than 3% of the subpopulation the sample size was increased to 3% of the sub-population.
- 6.5.9 Using our data interrogation software, each sub-population of individual student data was extracted and using random sample functionality within the software we extracted the samples and exported the sample items to an Excel file.
- 6.5.10 An Excel file containing the individual sample items was provided to the University via our secure FTP facilities and we requested details of the modules selected by the student for 2006/7.
- 6.5.11 To assess non-completion we considered two bases.

6.5.12 Basis 1 - BDO's interpretation of the HESES Regulations

The following criteria was used to determine whether a student was classified as a non-completion:

- For each registered module the student passed or undertook the final assessment
- Modules registered on the student record are all treated as if the student intended to engage on them, therefore any module with 0 marks was classified as a non-completion.
- Where a student was full time and the total credits of registered modules was less than 120 credits the student was classified as a non-completion.



• Where there was no evidence of a final assessment and there were no mitigating circumstances that would result in the module being discounted for the purposed of determining non-completion, the student was classified as a non-completion (eg where it is agreed in advance that an individual student will not attend the first presentation of an examination, but instead sit a specified subsequent presentation.

6.5.13 Basis 2 - Alternative Criteria

Basis 2 is a variant on the above, used by the University. The fact that a student is registered for a module is not considered conclusive evidence that they intended to study the module. To establish whether a student intended to study a module they must have engaged on the module. Engagement is defined as the student submitting coursework, having attendance recorded, sitting an exam or undertaking some other assessment. Where a student has not engaged on a module, the module is treated as if the student had never intended to study it.

The following criteria were used to determine whether a student was classified as a non-completion:

- For each engaged module the student passed or undertook the final assessment
- Where a student was full time and the total credits of registered modules were less than 90 credits, the student was classified as a non-completion
- Students who had no modules completed were classified as a noncompletion
- Students who had completed less than 120 credits and had any module with which they had engaged recorded as not completed were treated as a non-completion
- For an engaged module, where there was no evidence of a final assessment and there were no mitigating circumstances that would result in the module being discounted for the purposed of determining non-completion, the student was classified as a non-completion (eg where it is agreed in advance that an individual student will not attend the first presentation of an examination, but instead sit a specified subsequent presentation).



6.5.14 Final Assessment

In order to conclude on whether a student had undertaken a final assessment we used the following criteria to determine if a student had undergone final assessment:

- Where a student had not passed a module and the agreed marks were over 20%, they were "deemed" to have undertaken final assessment
- Where a student had not passed a module and the agreed marks were less than 20%, we reviewed the module components to identify the component representing the final assessment

We considered that 20% was a reasonable value for substantive follow-up work, enabling the level of any additional work to substantiate our opinion to be manageable. There are likely to have been additional non-completions identified if the value had been set higher or if all modules had been reviewed.

The component representing the final assessment was determined as follows:

- Where a module had exams the one with the largest component value was taken
- Where there were no exams, the component with the latest due date was taken or, where a module had two components with the same latest due date, the one with the largest component value was taken
- 6.5.15 The University provided a printed Student Module Result Status report from SITS in respect of each student in the sample together with an Excel file "bdo_sample_modules.xls" detailing the credit values associated with the modules registered to the student.
- 6.5.16 Where full time students had completed less than 90 credits we requested details of any mitigating circumstances in respect of the student being full time but studying less than 90 credits and evidence to support the mitigating circumstances.
- 6.5.17 Where a student module had agreed marks of less than 20 for a module we requested a module component record to assess whether the student had undergone the final assessment.
- 6.5.18 Where a student was a completion under Basis 2 but had 0 agreed marks on any modules, we requested module component records to ensure that there was no evidence of engagement.



6.5.19 The results are summarised in the following table:

Level	Mode	Course Block	Basis 1 Number of students	Basis 2 Number of students	Basis 1	Basis 2
Undergraduates & FD	FTSW	0 and 1	79	61	48.17%	37.20%
Undergraduates & FD	FTSW	2	46	26	39.32%	22.22%
Undergraduates & FD	FTSW	3, 4, L and S	26	18	37.14%	25.71%
Total Undergraduates & FD	FTSW		151	105	43.02%	29.91%
Undergraduates & FD	PART	0 and 1	38	37	49.35%	48.05%
Undergraduates & FD	PART	2, 3, 4, L and S	14	9	24.56%	15.79%
Total Undergraduates & FD	PART		52	46	39.84%	35.67%
Postgraduates	FTSW	All	22	19	38.60%	33.33%
Postgraduates	PART	All	16	11	28.07%	20.00%
			241	181		

6.5.20 Using our software we evaluated the results of our testing and from the number of deviations observed within our samples above, we are 95% confident that the population deviation rates have the following upper and lower limits.

Level	Mode	Course Block	Basis 1 - Population deviation lower limit	Basis 1 - Population deviation upper limit	Basis 2 - Population deviation lower limit	Basis 2 - Population deviation upper limit
Undergraduates & FD	FTSW	0 and 1	40.44%	55.97%	29.10%	44.95%
Undergraduates & FD	FTSW	2	30.56%	48.62%	15.18%	30.69%
Undergraduates & FD	FTSW	3, 4, L and S	26.06%	49.33%	16.14%	37.36%
Total Undergraduates & FD	FTSW	All	37.86%	48,30%	25.24%	34,92%
Undergraduates & FD	PART	0 and 1	37.93%	60.81%	36.71%	59.55%
Undergraduates & FD	PART	2, 3, 4, L and S	14.33%	37.50%	7.64%	27.75%
Total Undergraduates & FD	PART	All	30.64%	47.46%	26.48%	42.88%
Postgraduates	FTSW	All	26.37%	52,03%	21.69%	46.71%
Postgraduates	PART	All	17.18%	41.29%	10.20%	31.69%



- 6.5.21 The University's HESA05 FUNDCOMP value for a student used a field relating to student progression that did not reflect the HESES Regulations on non-completion and as a result, the HESES05 recreation is not a reliable source for the estimate of non-completions.
- 6.5.22 The number of non completions using BDO's interpretation of the HESES Regulations (Basis 1 (6.5.12)) for full time undergraduates and foundation degree students ranges from 37% to 48% whereas the University estimated non completions at less than 3% (6.5.19).
- 6.5.23 On Basis 2 (6.5.13) the range is 22%-37%.
- 6.5.24 The difference between Basis 2 and the assumptions in the HESES return (6.5.19) for 2006/07 created an overclaim of funding in excess of £15m for the University.
- 6.5.25 From our testing above, and using a 95% confidence level, we estimate the non-completion rate to be between the following lower and upper limits.

Level	Mode	Course Block	Basis 1 - Population deviation lower limit	Basis 1 - Population deviation upper limit	Basis 2 - Population deviation lower limit	Basis 2 - Population deviation upper limit
Undergraduates & FD	FTSW	0 and 1	40.44%	55.97%	29.10%	44.95%
Undergraduates & FD	FTSW	2	30.56%	48.62%	15.18%	30.69%
Undergraduates & FD	FTSW	3, 4, L and S	26.06%	49.33%	16.14%	37.36%
Total Undergraduates & FD	FISW	All	37.86%	48.30%	25.24%	34.92%
Undergraduates & FD	PART	0 and 1	37.93%	60.81%	36,71%	50 5 50
Undergraduates & FD	PART	2, 3, 4, L and S	14.33%	37.50%	7.64%	59.55% 27.75%
Total Undergraduates & FD	PART	All	30.64%	47.46%	26.48%	42.88%
Postgraduates	FTSW	All	26.37%	52.03%	21.69%	16 710
Postgraduates	PART	All	17.18%	41.29%	10.20%	46.71% 31.69%

6.6 Load Factor

- 6.6.1 The source of the part time load factors was the HESES05 recreation. The rate of PT:FTE for table 3 from the HESES05 recreation was applied to the HESES06 return for part time students and is supported by work papers.
- 6.6.2 We noted that the principal of module engagement is not used in the HESA return when determining STULOAD (Student FTE) which has the effect of overstating the part time load factor in the HESA data.



6.6.3 Using the data sample for part time students, we identified the number of modules students had engaged on and the credits associated with each student. For each student the part time load was calculated by dividing the credit on engaged modules by 120. A summary of the results is detailed below:

Price g	roup	Per HESES 2006-07	Per Data Sample – All students	Per Data Sample – Completions only
ALL	FD & UG	0.43	0.52	0.39
	PGT	0.44	0.58	0.53

6.6.4 The effect of using the rates derived from the data sample is as follows:

Price g	roup	Students per HESES06	PTE change Per Data Sample All students	PTE change Per Data Sample – Completions only
ALL	FD & UG	6,571	492	-263
	PGT	2,536	355	228

Conclusion

6.6.5 Based on our work using students who are completions the FTE value for FD & UG is overstated by 4% and PGT is understated by 9%.

6.7 Categorisation of Student by Price Group

- 6.7.1 Each module is allocated to a price group with a course, made up of a number of modules, determining the allocation of a student on a specific course to particular price groups.
- 6.7.2 As new modules are devised, the module is discussed with the department head, the module is then allocated to a price group by the planning office.
- 6.7.3 When HESES guidance details changes to price groups the impact on the allocation of existing modules to price groups is reviewed. In addition, prior to the start of the academic year the planning office reviews the price groups of all courses on SITS. A final review is performed as part of the review HESES return.
- 6.7.4 Details of module price groups were provided in Excel file "25806_ata for audit of LondonMet HESES 2006 by BDO Stoy Hayward.xls". This data was imported into our data interrogation software.
- 6.7.5 The modules allocated to each separate price group was extracted and sorted by department code. The module names were then reviewed for modules not expected in a price group.



- 6.7.6 There are 226 modules allocated to price group B and 11 modules allocated to price group C where we requested additional evidence from the University to support the allocation of the module to that price group.
- 6.7.7 Of the price group B queries there were 46 modules relating to Aviation which were allocated to the following JACS codes
 - H400 (Aerospace Engineering) 5 modules
 - H460 (Aviation Studies) 25 modules
 - N600 (Human Resource management) 1 module
 - N800 (Tourism, Transport and Travel) 15 modules

We were informed that these have all been allocated to cost centre 21 as the members of staff delivering these modules are all associated with costs centre 21. This approach is reasonable.

- 6.7.8 Of the price group B queries there were 25 modules relating to Nutrition which were allocated to the following JACS codes
 - B400 (Nutrition) 16 modules
 - D600 (Food and Beverage Studies) 3 modules
 - N900 (Others in Business and Administration studies) 6 modules

We were informed that these have all been allocated to cost centre 10 as the members of staff delivering these modules are all associated with costs centre 10. This approach is reasonable.

- 6.7.9 Of the price group B queries there were 155 modules relating to Art, Media & Design which were allocated to the following JACS codes
 - G100 (Mathematics) 1 modules
 - G600 (Software Engineering) 2 modules
 - H600 (Electronic and Electrical Engineering) 1 modules
 - J500 (Materials Technology not otherwise specified) 10 modules
 - J900 (Others in Technology) 15 modules
 - J950 (Musical Instrument Technology) 7 modules
 - N100 (Business studies) 3 modules
 - N500 (Marketing) 2 modules
 - P300 (Media studies) 1 modules
 - V300 (History by topic) 5 modules
 - V350 (History of Art) 4 modules
 - V370 (History of Design) 3 modules
 - W100 (Fine Art) 4 modules
 - W200 (Design studies) 18 modules
 - W300 (Music) 5 modules
 - W600 (Cinematics and Photography) 5 modules
 - W700 (Crafts) 63 modules



- W790 (Crafts not elsewhere classified) 3 modules
- X200 (Research and Study Skills in Education) 1 modules
- X220 (Study skills) 1 modules
- Unallocated 1 modules

We were informed that these have all been allocated to cost centre 18 as the members of staff delivering these modules are all associated with costs centre 18. This approach is reasonable.

6.7.10 We discussed the 11 modules allocated to price group C and we were unable to satisfy ourselves that these should be C and not D as we would expect. If these modules were moved to price group D there are 129 HEFCE funded students would need to be transferred on these particular modules. We do not have data to be able to split these students by level and mode.

Conclusion

- 6.7.11 We believe that price groups are being correctly operated within the University, although there are potential exceptions noted in section 6.7.10.
- 6.8 Control over Duplication of Student Records
- 6.8.1 Students are able to be enrolled on more than one course. These students have a unique student record but can have more than one course record, and therefore SCJ (Student Course Join) code.
- 6.8.2 We requested student data supporting and reconciling with the total student numbers by level, mode and fundability included in column 1 of tables 1a and 3 of the HESES06 return from the University. The data was supplied to us via HEFCE's data transfer facilities in an Excel file "25806_ata for audit of LondonMet HESES 2006 by BDO Stoy Hayward.xls".
- 6.8.3 The data provided was imported into our data interrogation software and the HEFCE fundable students were extracted. We tested the SCJ Code to identify whether there were student records where this was duplicated. We did not identify any records where the SCJ Code was duplicated.



6.8.4 In addition to the above, we created a virtual field, which had the student number only and tested to identify whether students were included in the HESES06 more than once. Students that were registered on more than one course were extracted using the duplicate test function within our data interrogation software. The results are summarised below:

Description	Number of students	Number of HESES records
Students registered on 2 full time courses Students registered on 1 full time and 2 part time	2	4
Students registered on 1 full time and 1 part time	1	3
courses	63	126
Students registered on 2 part time courses	15	30
	81	163

- 6.8.5 The HESES06 regulations state that a student may study towards two or more independent qualifications concurrently. Each programme of study would effectively generate its own year of programme of study, which would be countable. For example, a student studying towards both a PhD and an unrelated undergraduate professional qualification would generate two years of programme of study each year.
- 6.8.6 For students studying more than one course, we reviewed the courses and are satisfied they are in accordance with the above regulation.

Conclusion

6.8.7 Based on the work above there are controls are in place to prevent duplication of students on the HESES return.

6.9 Franchise Arrangements

- 6.9.1 There are a limited number of course programmes with franchise arrangements with a local college.
- 6.9.2 These students are on SITS and are flagged as part of a franchise arrangement and are excluded from the HESES06 return. Where the students are not the University's students for funding purposes they are excluded
- 6.9.3 Within the HESES06 extraction process the SQL code uses the study location values in order to be able to distinguish between wholly and partly franchised out.

Conclusion

6.9.4 Based on our work, students relating to franchise agreements were treated appropriately.



6.10 Application of HESES Rules for Student Inclusion

- 6.10.1 The process for including students in the HESES06 return was discussed with S40(2)
 - 6.10.2 The data elements required to analyse the SITS student data for HESES06 purposes and the data element values required to identify each characteristic were agreed. The SQL code was then developed to flag students to exclude the following students from the HESES return:
 - Exclude students writing up
 - Exclude exam only students
 - Include students who are attending courses for anything over 3% full time
 - Cross year courses are counted in one year only (and that systems exist to monitor this)
 - Exclude interruptions
 - We reviewed the document detailing the process for extracting the HESES06 data as well as the SQL code. The classes of students detailed in section 6.10.2 are excluded using the following flags:
 - (b) Students writing up

Any records with SCE_STAC = 'EU' were marked as 'WRITING UP OR substr(nvl(t_funding_mode,sce_moac),1,1) = 'A''

(c) Exam only students

These were not removed in error which, according to the University's resulted in 113 students being incorrectly included in the HESES06 return. We analysed the HESES data received from the University and there were 70 funded students with enrolment status EA (Enrolled for Assessment only). We understand the code has now been changed to remove students with an enrolment status EA.

(d) Students who are attending courses for anything under 3% full time equivalent

 $nvl(crs_erfm,'*') = 'N'$

These are identified by a flag on the course record, with all students on these courses being excluded from HESES.



(e) Cross year courses are counted in one year only

It was the University's practice on SITS to enrol students as writing up or absent for the part of their course crossing into the second academic year to deal with this. These courses are then counted in one year only as students writing up or absent students are excluded from HESES.

(f) Interruptions

INTERMIT < 1/12 where sce_stac in ('EI', 'EK')
OR
INTERMIT < 1/12 where sce_stac = 'EF'

Conclusion

6.10.3 With the exception of exam only students where 70 students (1 part time FD, 6 full time and 16 part time undergraduate and 1 full time and 46 part time post graduate taught) were included as fundable, there were procedures in place to remove students detailed in section 6.10.2.

6.11 Student Existence

- 6.11.1 We requested the student data supporting and reconciling with the total student numbers by level, mode and fundability included in Column 1 of tables 1a and 3 of the HESES06 return from London Metropolitan University (LMU). The data was supplied to us via HEFCE's data transfer facilities in an Excel file "25806_ata for audit of LondonMet HESES 2006 by BDO Stoy Hayward.xls".
- 6.11.2 The data provided was imported into our data interrogation software and the HEFCE funded students identified. Following the agreement of a summary of the data to HESESO6, HEFCE fundable students were extracted using the criteria FUNDABILITY_STATUS="E".



6.11.3 We determined that in order to test the student existence, the population should be divided in to a number of sub-populations. The sub-populations with the number of funded students are detailed below:

Level	Mode	Course Block	HEFCE funded students	Sample for completion testing	Sample for additional evidence
I Vandamana desartan D. T2D	ETECHN	0 1 1	E 140	164	£0
Undergraduates & FD	FTSW	0 and 1	5,448	164	58
Undergraduates & FD	FTSW	2	3,887	117	58
Undergraduates & FD	FTSW	3, 4, L and S	2,329	70	58
Undergraduates & FD	PART	0 and 1	2,544	77	58
Undergraduates & FD	PART	2, 3, 4, L and S	1,584	57	57
Postgraduates	FTSW	All	1,111	57	57
Postgraduates	PART	All	1,647	57	57
	<u> </u>		18,550	599	403

- 6.11.4 Sample sizes were determined using 95% confidence rates, 0% fail rate and 5% tolerable error. This was kept for the additional evidence required in respect of students which included course information. For completion testing, where the sample size was less than 3% of the sub-population the sample size was increased to 3% of the sub-population.
- 6.11.5 Using out data interrogation software, each sub-population of individual student data was extracted. Using random sample functionality software we extracted the samples for completion testing and exported the sample items to an Excel file. Where the sample was not equal to the sample required for additional evidence, a sub-sample was randomly selected from the sample for completion testing.
- 6.11.6 An Excel file containing the individual sample items was provided to the University via our secure FTP facilities and we requested details of the modules selected by the student for 2006/7.
- 6.11.7 The University provided a printed Student Module Result Status report from SITS in respect of each student for completion testing together with an Excel file "bdo_sample_modules.xls" detailing the credit values associated with the modules registered to the student.
- 6.11.8 Where full time students had completed less than 90 credits, we requested details of any mitigating circumstances in respect of the student being full time but studying less than 90 credits and evidence to support the mitigating circumstances.



- 6.11.9 Where a module had agreed marks of less than 20, we requested module component records to assess whether the student had undergone the final assessment.
- 6.11.10 For students selected for 'additional evidence', we requested the printed and signed enrolment confirmation form (or equivalent) and evidence to support classification of home/overseas status including evidence of student loan funding or appropriate evidence to support fee status.

Level	Mode	Course Block	No evidence to support mode of attendance	No evidence to support home fundability status
Undergraduates & FD	FTSW	0 and 1	1	0 (18)
Undergraduates & FD	FTSW	2	ol	1(1)
Undergraduates & FD	FTSW	3, 4, L and S	0	3 (14)
Undergraduates & FD	PART	0 and 1	10	5 (3)
Undergraduates & FD	PART	2, 3, 4, L and S	5	10 (15)
Postgraduates	FTSW	All	14	7 (23)
Postgraduates	PART	All	2	1 (32)
	<u> </u>		32	27 (106)

- () Only limited evidence available.
- 6.11.11 Additional work on mode of attendance is included in section 7.3.
- 6.11.12 Additional work on mode of attendance is included in section 7.4.

- 6.11.13 There is evidence to support the existence of students within the sample.
- 6.12 Course Fundability
- 6.12.1 As part of our data sample, where a student was classified as a full time student we reviewed the course specification for evidence to support the course as full time fundable. We selected 174 Undergraduates & FD students and 57 PGT students and reviewed the course specifications.



6.12.2 The following courses were identified where the course specification did not support the classification as full time HEFCE fundable:

Route Code	Route Description	Comments	Number of students in HESES06
LEGPRA-C	Legal Practice	Course material states the course is 80 credits and minimum 1 year part time.	191
CEMANC-N	Certificate in Management Studies	Course material states mode of attendance PTD, PTDE over 2 years.	14
EYLEAD-N	Early Years Integrated Centre Leadership	Course material states 60 credits and mode of study as part time	31

- 6.12.3 As part of our data sample, where a student was classified as a part time student we reviewed the course specification for evidence to support the course was fundable. We selected 115 Undergraduates & FD students and 57 PGT students and reviewed the course specifications.
- 6.12.4 The following courses were identified where the course specification did not support the classification as HEFCE fundable:

Description	Comments	Number of students in HESES06
Open Language Programme	Students generally take one or two modules and do not appear to progress beyond course block 1.	362
Institute of Credit Management	The course is 15 weeks. The course handbook states students can study to foundation, certificate (Level 3) and Diploma (Level 4); however, there does not appear to be any entry requirements for any of these. Students do not appear to progress beyond course block 1.	76

Conclusion

6.12.5 The University's process to determine the mode and fundability status of courses is not effective.



- Undertake a HEFCE-style audit of the resubmitted 2006-07 HESES return. This will extend to price group testing. Part 2 Comparison of HESES06 data with HESA 2006-07 data
- 7.1 Students in the HESES06 return not in HESA 2006-07
- 7.1.1 The funded students in the HESES06 return were compared to the students included in the HESA 2006-07 return using the SCJ Code (Student Course Join). The results are summarised below:

Fundable	Number of students
Matched to HESA records	18,486
Not matched to HESA records	64
	18,550

The 64 students by level and mode are:

Level	Mode	Number of students
FD	FTSW	3
UG	FTSW	33
UG	PART	17
PGT	FTSW	4
PGT	PART	7
		64

Conclusion

- 7.1.2 64 students were included in the HESES06 return as fundable but, as they were not in the HESA 2006-07 return, they should not have been included in the HESES06 as fundable students.
- 7.2 Students included in the HESES06 student population in error
- 7.2.1 The HESES06 recreate program used an algorithm to populate a derived field HESEXCL that identifies whether students should have been excluded from the HESES06 return due to one of more of the following:
 - (a) Students taught wholly outside the UK
 - (b) Dormant, sabbatical or students writing up
 - (c) Students with an FTE of less than 3%
 - (d) Students on standard academic years who withdrew before 2 December 2006 or students on non-standard academic years who withdrew before the anniversary of their commencement date.



7.2.2 The HESES06 data was joined to the HESA 2006-07 data and the HESA 2006-07 derived fields using our data interrogation software. Where students are treated correctly HESEXCL has a value of 0, we extracted all students included in the HEDSES06 where HESEXCL was not equal to 0 and summarised the results by type of error. The results are summarised below:

Value	Description	Number of students
16	Students taught wholly outside the UK.	28
128	Students with an FTE of less than 3%.	12
160	Dormant, sabbatical or students writing up Students with an FTE of less than 3%.	23
512	Students on standard academic years who withdrew before 2 December 2006 or students on non-standard academic years who withdrew before the anniversary of their commencement date.	120
		183

The 183 students by level and mode are:

Level	Mode	Number of students
FD	FTSW	6
UG	FTSW	63
UG	PART	59
PGT	FTSW	32
PGT	PART	23
		183

Conclusion

- 7.2.3 Based on the HESA return and analysis above there were 101 full time and 82 part time students included in the HESES06 return in error.
- 7.2.4 Of these, there were 120 students recorded in the HESA 2006/07 return who had left prior to 1 December 2006, per the HESA return.
- 7.2.5 As HESA and HESES used SITS as the primary source of data this error is either caused by delays in recording the date a student left within SITS or the data extract for the HESES06 return failed to identify a student to be excluded from the HESES06 fundable population.



- 7.3 Students included in the HESES06 return where the mode of attendance in HESES06 return is inconsistent with the HESA 2006-07 data
- 7.3.1 The HESES06 recreate program used an algorithm to populate a derived field HESMODE that identifies the mode of attendance from related HESA fields. The HESES06 data was joined to the HESA 2006-07 data and the HESA 2006-07 derived fields using our data interrogation software. We extracted all students included in the HEDSES06 where the HESES mode did not match the mode derived from the HESA 2006-07 data. The results for HESES full time are summarised below:

Level	Mode	Mode derived from HSEA 2006-07 (HESMODE)	Number of students
FD	FTSW	PT	4
PGT	FTSW	PT	54
UG	FTSW	PT	327
			385

7.3.2 We reviewed the data in respect of the above and then extracted only those students with HESA MODE=31 (part time). The details of these were as follows

Level	Mode	Mode derived from HSEA 2006-07 (HESMODE)	Number students	of
FD	FTSW	PT		1
PGT	FTSW	PT		28
UG	FTSW	PT		274
				306

- 7.3.3 Of the above, 11 FD and UG students were included in the data audit sample and of these 10 were classified as non-completions using the University's policy for classifying students as non-completions (Basis 2). Of the 11 there were 8 students studying less than 90 credits.
- 7.3.4 Of the above, 4 post graduate taught students were included in the data audit sample and of these 3 were classified as non-completions using the University's policy for classifying students as non-completions (Basis 2). Of the 4 there were 3 students studying less than 90 credits.
- 7.3.5 From 6.11.10, there was 1 full time Undergraduate & FD and 14 full time post graduates where we were not provided with evidence to support the student's mode of attendance as submitted in HESES.



7.3.6 The results for HESES part time are listed below:

Level	Mode	Mode derived from HSEA 2006-07 (HESMODE)	Number of Students
FD	PART	FTS	7
PGT	PART	FTS	10
UG	PART	FTS	479
}			496

- 7.3.7 Of the above, 15 FD & undergraduates students were included in the data audit sample and of these, 0 were classified as non-completions using the University's policy for classifying students as non-completions (Basis 2). Of the 15, all were studying 90 credits or more, with 5 noted as paying a full time fee with the remainder having no fee band recorded.
- 7.3.8 Of the above, 1 post graduate taught students were included in the data audit sample and of these, 0 were classified as non-completions using the University's policy for classifying students as non-completions (Basis 2).
- 7.3.9 From 6.11.10, there were 15 part time FD & undergraduates and 2 part time post graduates where we were not provided with evidence to support the students MOA submitted in HESES.

Conclusion

- 7.3.10 From the analysis above, and our data audit work, 802 students had changed their recorded mode of attendance in the academic year between the HESES and HESA returns.
- 7.3.11 In respect of the 278 FD & UG students (section 7.3.2) recorded as full time in HESES and part time in HESA there were 11 included in our data sample, of these 8 (72.7%) were studying less than 90 credits.
- 7.3.12 In respect of the 4 postgraduate taught students (7.3.2) recorded as full time in HESES and part time in HESA there were 4 included in our data sample, of these 3 (75%) were studying less than 90 credits.
- 7.3.13 There is evidence that a significant number of the 306 full time students (7.3.2) had a mode recoded in HESES, which did not reflect the actual mode of study (ie part time). Of the 496 part time students (7.3.6), a significant number were effectively studying full time.



- 7.4 Students included in the HESES06 return where home fundable status in the HESES06 return is inconsistent with the HESA 2006-07 data
- 7.4.1 The HESES06 recreate program used an algorithm to populate a derived field HESTYPE that identifies the home fundable status of a student. The HESES06 data was joined to the HESA 2006-07 data and the HESA 2006-07 derived fields using our data interrogation software, we then extracted all students where the HESTYPE was not home fundable.

UG		Description	students
UG UG PGT PGT	HOMENF ISOV HOMENF ISOV	Home and EC non-fundable Island and overseas Home and EC non-fundable Island and overseas	18 22 45 27
P	GT	GT HOMENF	G ISOV Island and overseas HOMENF Home and EC non-fundable

Island and overseas	Mode PART PART PART PART PART	Level FD UG UG PGT PGT	Value ISOV HOMENF ISOV HOMENF ISOV	Description Island and overseas Home and EC non-fundable Island and overseas Home and EC non-fundable Island and overseas	Number of students
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- 7.4.2 Of the items tested for home fundability in section 6.11 there was 1 full time undergraduate student incorrectly recorded as home fundable when they were "overseas" and non-fundable. Based on this we can be 95% confident that the there are between 0.02% (2) and 3.14% (366) UG students incorrectly recorded as home fundable in the HESES06 return.
- 7.4.3 Of the sample tested for home fundability in section 6.11 there were 2 full time post graduates incorrectly recorded as home fundable when they were "overseas" and non-fundable. Based on this we can be 95% confident that the there are between 0.54% (6) and 11.28% (125) PG students incorrectly recorded as home fundable in the HESES06 return.

Conclusion

7.4.4 Based on the HESA return and analysis above there were 112 full time and 54 part time students incorrectly included in the HESES06 return as home fundable.



- 7.5 Students included in the HESES06 return where level of study in the HESES06 return does not appear to be consistent with the HESA 2006-07 data
- 7.5.1 The HESES06 recreate program used an algorithm to populate a derived field HESLEVEL that identifies the level of study of a student. The HESES06 data was joined to the HESA 2006-07 data and the HESA 2006-07 derived fields using our data interrogation software. We extracted all students included in the HEDSES06 where the HESES level did not match the mode derived from the HESA 2006-07 data.
- 7.5.2 From our analysis of students included in the HESES06 return where the level derived from the HESA 2006/07 data did not agree to the level derived from the HESES06 return there were the following:-
 - (a) 1 HESES full time student FD had a HESES derived level of UG;
 - (b) 1 HESES full time student undergraduate had a HESES derived level of FD;
 - (c) 2 HESES part time student undergraduate had a HESES derived level of FD.

Conclusion

- 7.5.3 Based on the HESA return and analysis above there were 2 full time and 2 part time students included in the HESES06 return where the level derived from the HESA 2006/07 data did not agree to the level within the HESES06 return.
- 7.6 Students included in the HESES06 return where the length of programme of study in the HESES06 return does not appear to be consistent with the HESA 2006-07 data
- 7.6.1 The HESES06 recreate program used an algorithm to populate a derived field LENGTH that identifies the length of programme of study of a student. The HESES06 data was joined to the HESA 2006-07 data and the HESA 2006-07 derived fields using our data interrogation software. We extracted all students included in the HEDSES06 where the HESES length did not match the mode derived from the HESA 2006-07 data. The results are summarised below:

Level	Mode	Length per HESES06	Length Per HESA	Number of students
PGT	FTSW	L	S	6
PGT	FTSW	N	L	4
PGT	PART	L	S	3
PGT	PART	N	L	3

Conclusion

7.6.2 Based on the HESA return and analysis above there were 10 full time and 6 part time students included in the HESES06 return where the length of course per HESA 2006/07 data did not agree to the length per the HESES06 return.



- 7.7 Students included in the HESES06 return in column 1 where this does not appear to be consistent with the HESA 2006-07 data
- 7.7.1 The HESES06 recreate program used an algorithm to populate a derived field HESREG that identifies whether a student should form part of the column 1 HESES06 population. The HESES06 data was joined to the HESA 2006-07 data and the HESA 2006-07 derived fields using our data interrogation software. We extracted all students included in the HEDSES06 column 1 where the HESESREG was not equal to 1. The results are summarised below:
- 7.7.2 The following students should be included in Column 2

Mode	Level	Number of students
FISW	UG	768
FTSW	PGT	78
PART	UG	288
PART	PGT	146

7.7.3 Included in the above are the following students with a commencement date after 1 December 2006 that were included in column 1 of the HESES06:

Mode	Level	Number of students
FTSW	UG	5
PART	UG	5
PART	PGT	1

7.7.4 From a review of the HESES06 documentation, students with a commencement anniversary between 2 December and 31 July are not included in column 2 of the relevant table.

Conclusion

7.7.5 Based on the HESA return and analysis above there were 846 full time and 434 part time students included in the HESES06 return in column 1 that should have been included in column 2 per HESA 2006/07 derived data. There is a risk that these students may have been included in column 1 and column 2, however we have been unable to confirm the likelihood of this at the time of writing this report.



7.8 Students included in the HESES06 return where the fee level in the HESES06 return is not consistent with the HESA 2006-07 data

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7.8.1 The HESES06 recreate program used an algorithm to populate a derived field HESFEELEV that identifies the fee level of a student. The HESES06 data was joined to the HESA 2006-07 data and the HESA 2006-07 derived fields using our data interrogation software. We reviewed the results for inconsistencies between HESES06 and the HESA 2006-07 derived results.

Conclusion

- 7.8.2 The level of fees for students reported in the HESES06 return appears consistent with the data within the HESA 2006/07 return.
- 7.9 Price group allocation for the HESES06 return compared to HESA 2006-07 data
- 7.9.1 The HESES06 recreate program used an algorithm to populate derived fields PRGA, PRGB, PRGC, PRGD, PRGMEDIA, PRGITT, PRGINSET allocating the students study to price groups. The HESES06 data was joined to the HESA 2006-07 data and the HESA 2006-07 derived fields using our data interrogation software. We summarised the derived price group fields and compared this to HESES column 1 allocation of students to price groups.

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7.9.2 For full time the results were as follows:

		rer		•	
		HESES06	Per HESA		
		Total	Total		
		2006-07	2006-07	Difference	Difference
Price group		Actual	Actual	Students	%
	FD	-	-	-	0.00%
A	UG (excl. FD)	-	-	-	0.00%
	PGT	_	_	-	0.00%
В	FD	39.9	44.7	-4.8	-12.14%
	UG (excl. FD)	1,297.8	1,361.6	-63.8	-4.92%
	PGT	29.0	30.0	-1.0	-3.45%
C	FD	148.1	140.6	7.5	5.08%
	UG (excl. FD)	3,292.0	3,226.3	65.7	1.99%
	PGT	469.0	467.0	2.0	0.43%
D	FD	194.0	190.9	3.1	1.60%
	UG (excl. FD)	5,932.5	5,947.3	-14.8	-0.25%
	PGT	553.0	501.0	52.0	9.40%
MEDIA	FD	26.0	19.8	6.2	23.88%
	UG (excl. FD)	610.3	627.8	-17.6	-2.88%
	PGT	79.0	77.0	2.0	2.53%
Total	FD	408.0	396.0	12.0	2.94%
	UG (excl. FD)	11,132.5	11,163.0	-30.5	-0.27%
	PGT	1,130.0	1,075.0	55.0	4.87%
	Total	12,670.5	12,634.0	36. <i>5</i>	0.29%



7.9.3 For part time the results were as follows:

		Per	Per	1	
•		HESES06	HESA		
		Part Time	Part time		
		2006-07	2006-07	Difference	Difference
Price group		Actual	Actual	Students	%
	FD	-	-	_	0.00%
A	UG (excl. FD)	-	-	_	0.00%
	PGT	-	-	_	0.00%
В	FD	23.2	23,2	-	0.00%
	UG (excl. FD)	322.4	351.7	-29.4	-9.11%
	PGT PGT	29.0	28.0	1.0	3.45%
C	FD	8.0	8.0		0.00%
	UG (excl. FD)	1,041.4	974.5	66.9	6.42%
·	PGT	327.0	324,0	3.0	0.92%
D	FD	10.8	10.8	-	0.00%
	UG (excl. FD)	2,634.9	2,597.9	37.0	1.40%
	PGT	1,190.0	1,165.0	25.0	2.10%
MEDIA	FD	-	-	+	0.00%
	UG (excl. FD)	87.4	85.9	1.5	1.68%
	PGT	101.0	100.0	1.0	0.99%
Total	FD	42.0	42.0	-	0.00%
	UG (excl. FD)	4,086.0	4,010.0	76.0	1.86%
	PGT	1,647.0	1,617.0	30.0	1.82%
	Total	5,775.0	5,669.0	106.0	1.84%

Conclusion

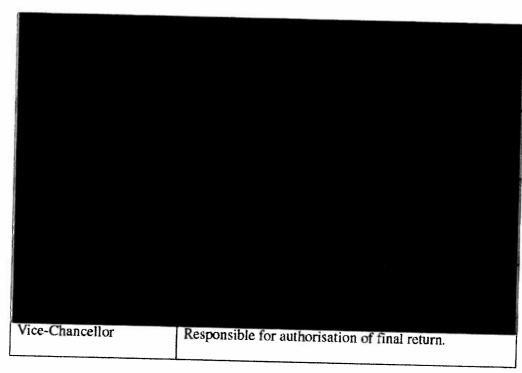
- 7.9.4 Full Time The allocation of students within the HESES06 is reasonable when compared to the HESA 2006/07 data.
- 7.9.5 Part time The allocation of students within the HESES06 is reasonable when compared to the HESA 2006/07 data.



- 8 Assess the preparation, assumptions and accuracy of the 2007-08 HESA student return, which the University will need to submit in October.
- 8.1 Late submission of HESA 2007-08
- 8.1.1 Following a meeting with the Clerk to the Board, the Director of Finance and the Director of Academic Administration on 2 December 2008, we were made aware that the University had submitted its HESA return in the last week of November (though due by 31 October) but was concerned that there were significant errors in the return.
- 8.1.2 The University believed that the errors were around four areas and that the errors, in aggregate, were material:-
 - (a) 2nd semester enrolments
 - (b) non-completion codes
 - (c) MBA credits
 - (d) dormant students
- 8.1.3 The University contacted HESA and requested that the University re-submit HESA once further work had been completed.
- 8.1.4 We have no confidence in the return that was submitted in November.
- 8.1.5 There are issues relating to the HESA data submitted on 4 December 2008. At the current time, it is unknown whether the issues identified relate to the data or to the coding structures used on SITS or by HESA. We understand that further work will be performed by the University to investigate this, with the results to be fed back through the Data Quality Group.
- 8.2 Obtain details of the persons responsible and involved in the preparation of the HESA return in respect of, compiling, reviewing and authorising
- 8.2.1 The roles associated with the HESA preparation were defined with the Data Quality Group, which has responsibility for the HESA return process. The following key post holders were involved in the preparation and submission of the HESA return:-



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- 8.3 Identify whether there have been any changes to the process or assumptions from the prior year.
- 8.3.1 All changes which are policy decisions are referred to the Data Quality Group for a wider discussion.
- 8.3.2 There have been two significant changes in respect of the HESA return for 2007-08.
 - (a) The first is the changes to the data structure for the HESA return. Student data at course level was submitted in previous returns whereas the 2007-08 return uses a format more closely linked to returning modules. This has required the HESA extract functionality to be rewritten and the identification of the relevant fields in SITS to provide the correct data.
 - (b) The second change is in respect of the calculation of the FUNDCOMP value. The FUNDCOMP value was previously based on a progression field within the SITS Student Record System, however the University recognised that this value was not consistent with the HESES/HESA Regulations. For HESA 2007-08 the University has implemented a new basis for the FUNDCOMP value that uses SQL code applied to data extracted from SITS.



- 8.4 Identify the documented process for the preparation of the return.
- 8.4.1 The HESA return has a high-level project plan and project risk register. We have received a copy of the plan dated 9 September 2008. There is a list of outstanding actions which is monitored by the Data Quality Group as the process progresses.
- 8.4.2 There are no additional checklists used within the process, as the University does not consider it necessary as the process to prepare and submit the HESA return is linear.
- 8.4.3 All changes that are policy decisions are referred to the Data Quality Group for a wider discussion. The decisions of the Data Quality Group are documented through minutes of the meetings.
- 8.5 Identify whether there is documentation that identifies the source of data to be included in the return.
- 8.5.1 The University has created a series of documents that map data required for the HESA 2007-08 return to its source. These have been prepared by a subgroup of the Data Quality Group called the Spreadsheet Group. The files documenting the source of the data for the HESA 2007-08 return are:

HESA_07_Spreadsheet_Current.xls HCI_2007_Spreadsheet_Current.xls HESA_Automations_draft.xls

The above files are working versions and we have not received final versions.

- 8.5.2 The data extract from SITS uses standard SITS functionality to create a separate table with the HESA return data. Whether a student is extracted to the table is dependant on an External Reporting field within the student record SITS systems.
- 8.5.3 All students are included unless the External Reporting field represents a value that should be excluded. Student studying overseas would have a specific value to exclude them from the standard HESA but included in the aggregate overseas record. Students who withdrew 14 days from the date they commenced also have an External Reporting value that identifies them not to be included in HESA return.
- 8.5.4 The record of whether a student should be included or excluded is maintained with in the SITS system and controlled by the SITS functionality. There is no document that defines the students to be included or excluded from the return and details how they are identified and excluded.



- 8.6 Review the minutes of the Data Quality Group and identify key issues and risks
- 8.6.1 The Data Quality Group comprises of of Academic Administration, and the Director of Finance.
 - 8.6.2 The Data Quality Group minutes were reviewed for matters relevant for the HESA 2007-08 return. Relevant sections from the minutes are detailed below.

Minutes 27 March 2008

 "agreed that the priority was to improve student record data, to ensure that it was fit for all agreed purposes"

Minutes 10 April 2008

- "stated the approach to the HESA return should be changed and that there should be more focus on using processes within the system, rather than creating records using SQL"
- "gather registration numbers from PT professional students to enable gathering of results data"
- "investigate a report to gather missing HESA data"
- "issue of how courses were recorded on SITS was raised a and area of risk"

Minutes 8 May 2008

- the negative effect on funding for students that study fulltime, but do not undertake final assessment was highlighted, "if there was activity recorded against a module then there would be nowhere to go"
- "large number of returners were non-completions"
- "need to reinforce with professional courses administration that there was a need to keep accurate records"

Minutes 29 May 2008

- "if there was no evidence of activity on a module then SMR records should be removed"
- "HEFCE do not fund dissertations and that we need to make sure that we do not allow the dissertations to drift from the main block of teaching"



Minutes 5 June 2008

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- Auto awards and HESA deadline "re-assessment period would mean data would change after the deadline"
- "may not need to change fee when there is a change of a students mode of attendance and that regulations around refunds may be changed"
- "could change mode of attendance this year, but that next year we would not be able to and that we must be able to show the intention of the student"
- "risks facing group and production of HESA return had not been considered and no attempt had been made to mitigate these risks"
- "production of the return was not being effectively managed"
- "need to be careful in how the return is produced if the internal auditors would be reviewing the processes, with particular reference to SQL being used to populate certain fields"
- "issue of date of module removal was an issue that needed to be discussed with Academic Administration"

Minutes 19 June 2008

• "whether work to identify students recorded as full time, but only engaging part time should continue"

Minutes 3 July 2008

- "institution should separate franchised and collaborative courses"
- "HEI records would not be created by processes within the system"

Minutes 17July 2008

- "SITS does not record module outcome in the manner required by the institutions"
- HESA "felt it important that some sort of file to be produced, as this could be used as evidence that HEFCE could have overestimated the non-completion figures"
- "file produced at the end of August could be misleading due to level of reassessment and lack of student engagement"
- "received numbers of failing students and these constituted 8% of student body" "many of these students would be discontinued"

Minutes 31 July 2008

- "systems built to address data quality for part time professional courses had gone live"
- "Tribal will provide a number of critical developments very late in August"



Minutes 14 August 2008

- "There are 120,000 Schema errors which need to be resolved before we can look at business rule errors".
- "concerns re ft/pt reporting and shifting to p/t so record reflected correctly that they were meeting their requirements"

Minutes 11 September 2008

- "mentioned that we can code things to the file without affecting the source data e.g. missing postcodes 'not known'" "we would need to write back to the system at some stage prior to final submission"
- "fix the file to gain breathing space and amend the source data so the final submission contains the amended data"
- "how to define final component, what if students don't have modules, wrong records that if removed will change from completed to in-completed i.e. for students who didn't intend to take the module"
- "if there is no exam there is no funding"
- OLP, in 2005/6 'if attended' we were allowed lea-way and given the benefit of the doubt".
- "0 credit modules need to be looked at" "may need to look at formula for these"
- "HESES looks at SMO so there would be a discrepancy of an SMR did not exist"
- Deletion of SMRs "in 2008/9 students would need to confirm if they are not doing a module"
- Deletion of SMRs "needed to be done before 1/12/2008 so doesn't appear on HESES"

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- "needs to analyse fees that are being charged as 300 E2 students had FT fees"
- "testing few students with fund comp 3 has not been done yet" (Year of programme of study not yet completed, but has not failed to complete)
- "file cannot be committed until dormant students are processed"
- "file needs to be rebuilt but source data has not been amended"
- "firstly file must match source data and secondly must be able to build source data from source data"



\$40(2)

Minutes 23 October 2008

- "implications of OLP students not taking assessments. External students may have to pay a higher fee if the University does not receive HEFCE funding for them"
- "FT one semester students have to be recorded as FT for fee purposes"
- "testing of FT one semester only students with '3' had not yet been carried out"
- dormant students to "produce SQL solutions where possible".
- "some other courses had been identified for the Aggregate Overseas Return so will need to de-commit and then re-commit"
- "documentation had been produced to identify variations in full time fees and the FT definition issue"
- "methodology for establishing fundability of professional course students had been circulated and would be discussed at today's meeting"
- "The Group agreed to use the methodology set out in the paper for the 2007/8 HESA return. It was noted that this was based on the methodology set out in the London Metropolitan Non-completion review produced by HEFCE in April 2008. has received data from relating to attendance at external exams and also LMBS internal registers of attendance."

HESA "there were substantial errors that need to be resolved"

- 8.6.3 From a review of the minutes, there is a clear focus on the funding implications of the data.
- 8.7 Consider the presentation made to BDO Stoy Hayward LLP on 24 September 2008
- 8.7.1 BDO attended a presentation by the University on 24 September 2008. The following were considered relevant for the HESES06 and HESA 2007-08 returns.
- 8.7.2 The "front desk" at enrolment, which assesses the fee status of students, was introduced in 2007-08. Evidence of home /overseas status is checked during the attendance at the enrolment process, no document references or copies of the evidence are retained.
- 8.7.3 We were told that during enrolment in September 2006 the main systems were down for a week.
- 8.7.4 General access to SITS student data is on a read-only basis.
- 8.7.5 Undergraduate part-time There is a large proportion of professional exams. With these, there is a reliance on the external examining bodies to provide results to the University. This is problematic.



- 8.7.6 Undergraduate full-time to part-time This is usually at the start of the academic year rather than part way through the year. The change requires evidence that the change is authorised, ie not merely recorded.
- 8.7.7 We were told that full time study is classified by the University as 90 credits (6 modules) or above.
- 8.7.8 We have however extracted the section below from the University's 2008-09 Academic Regulations regarding full time and part time undergraduates:-
 - (a) A full-time programme of study shall normally comprise 4 modules in a semester (8 modules in an academic year). Exceptionally and with the approval of the Director of Undergraduate Operations or nominee a full-time programme of study may comprise no fewer than 3 modules in each semester (6 modules in an academic year) or no more than 5 modules in each semester (10 modules in an academic year). Such arrangements exclude transferred credit.
 - (b) A part-time programme of study shall be one comprising no more than 6 modules in an academic year and no more than 3 modules in a semester.
- 8.7.9 Progression is based on results but also includes judgement by academic staff. Extract from 2008-09 Academic Regulations regarding progression:

A student shall be deemed to have completed the requirements of the Certificate level when he or she has:

- completed modules equivalent to 120 credits at Certificate level and
- achieved passing marks in at least 90 credits of these modules including any required by the course specific regulations to be passed
- 8.7.10 We are concerned with the inconsistency applied by the University of its own regulations on non-completions in determining the algorithms applied to HESA.
- 8.7.11 For 2008-09 LMU will use data from other systems to identify "early walkers". These include the turnstile systems controlling access to the LMU buildings, which will be analysed using SQL queries used. Further mechanisms, using IT systems, to review attendance are being implemented but the reporting tools are still in development. It is worth noting that such mechanisms were envisaged and presented to governors in 2003 but have never been fully implemented.
- 8.7.12 HESA: SITS produces output for HESA returns. Field values are then altered. HESA funding code (FUNDCOMP) is based queries using non HESA data.
- 8.7.13 HESES non-completion rates use the HESES recreation from HESA data.



- Are there other relevant issues that would threaten the underlying assumptions and accuracy of the HESA return.
- 8.8.1 As part of the HESA data requirements there are fields that cannot be blank. Where the University does not consider that these impact funding or performance indicators then estimated values may be added to be able to submit a return. The University gave the year a student obtained an A level as an example of the nature of the data where this could be used
- 8.9 Where fields within the return do require judgements or analysis of other data fields to determine a value, identify whether the assumptions have been documented
- 8.9.1 The field that requires the analysis of other data elements within the SITS system is the FUNDCOMP value. This has been considered separately.
- 8.9.2 As SITS data fields are not necessarily used in a standard way the requirement of the HESA field is considered and the most appropriate SITS field is selected to provide the data for the HESA return. As discussed earlier there is documentation to map HESA fields to SITS fields which has been developed within the Data Quality Group
- 8.10 Identify the processes to review the accuracy of the data within the return.
- 8.10.1 XML files submitted to HESA and the resulting error reports are the primary tool used to identify potential issues with the HESA data. The XML files are error reports are retained.
- 8.10.2 HESA errors are split in to two types, Schema and Business. All Schema errors must be cleared before business errors are provided.
- 8.10.3 Following the submission of the data, Check Documentation is produced. The Planning Office reviews the Check Documentation and raises any issues.
- 8.10.4 Issues with the latest HESA (submitted) data were discussed at the December Data Quality Group meeting. At the current time, it is unknown whether the issues identified relate to the data or to the coding structures used on SITS or by HESA. Further work will be performed to investigate this with the results to be fed back through the Data Quality Group.
- 8.10.5 We reviewed the verification report from the HESA data submitted on 4 December 2008. There were 33,207 records processed and 12,698 rule warnings. These warnings identify potential but not necessarily actual referential errors within the data submitted.



- 8.10.6 The single largest warning was "Instance.FUNDCOMP. can only be 2 when (Instance.RSNEND exists and Instance.ENDDATE is not null) or (Instance.NOTACT exists) or (Instance.MODE = 63, 64, 73 or 74)" which applied to 6,195 records. RSNEND = Reason student left instance, ENDDATE = Date student left instance, NOTACT=Student has suspended study, Mode=63,64,73,74 indicate dormant status). This business rule expects non completions to have left and, as this is not expected to be the case for significant number of students at the University this is not considered significant.
- 8.11 Identify how specific classes of students are identified and treated
- 8.11.1 The table below details how classes of students are identified. Using the external report flag, they would be excluded from the HESA return.

Students writing up	Identified by the enrolment status
Exam only students	Identified by the enrolment status
Students attending less than 3% full time	Identified by the enrolment status and through the module count
Cross year courses	Identified through there start date
Interruptions	Identified by the enrolment status

- 8.11.2 The logic used is the same as HESES and is detail in section 6.10.3, with the exception that students with enrolment status EA (Enrolled for Assessment only) who are not registered for any credit are now also excluded as they are exam only.
- 8.12 Identify the reconciliations performed to ensure the return accurately represents the data in the Student Records System
- 8.12.1 All data is extracted from SITS via the SITS functionality
- 8.12.2 Student records that are excluded are flagged within SITS. A review of the excluded students is performed to ensure they have been correctly excluded. This review is not documented.
- 8.13 Identify whether the process for final approval of the return has been defined
- S40(2) 8.13.1 will take the Vice Chancellor through the final HESA return and it will be approved by the Vice Chancellor.
 - 8.14 Identify the final checks on data accuracy of the data to be sent within the return
 - 8.14.1 The Planning Office will review the HESA return from the perspective of funding implications via the HESES recreation process.
 - 8.14.2 There is no process planned to formally review final HESA warnings and document why issues are not considered a threat to the HESA data.

8.15 Conclusion

- 8.15.1 We have no confidence in the HESA 2007-08 return that was submitted in November 2008.
- 8.15.2 We cannot conclude on either the accuracy or integrity of the HESA 2007-08 return submitted on 4 December 2008 although we note that the non-completion rates are comparable to those determined by our data audit work.
- 8.15.3 In order to assess the accuracy of the HESA 2007-08 return we recommend that some detailed substantive testing be performed on the underlying HESES data.



- Assess the extent to which the findings of 2003-04 and 2004-05 HESES data audits were acted upon.
- 9.1 From information the University (Executive) has put forward, it is clear that a number of HEFCE letters to the Vice Chancellor were shared with the Executive of the University but we have not been presented with a trail into governors or internal and/or external auditors.
- 9.1.1 We have reviewed all the papers submitted to us by the University, and reviewed board and committee papers (last five years, main board and two committees Finance & Human Resources Committee and Audit Committee).
- 9.2 The Vice Chancellor received a letter dated 11 August 2006 from HEFCE relating to the funding implications of the reconciliation of 2004-05 HESA and HESES data.
- 9.2.1 With this information, we would have expected management to carry out further data integrity checks (either directly or through Internal Audit) to provide evidence that their systems could be relied upon and to provide robust information for budgeting and for governors.
- 9.2.2 This should have included a comparison of the institution's progression and non-completion definitions against HEFCE's (full time and part time)
- 9.2.3 The University should have prepared a model of the funding implications in order to understand the implications of their strategy.
- 9.2.4 Not to carry out detailed checks on student numbers and data integrity against the funding rules was unreasonable and should have been done for 2005/06 and taken into account in 2006/07.
- 9.2.5 The University was running 'financially blind' with no reasonable mechanism to understand its base funding level yet was spending based on income it was not eligible for.
- 9.3 Unusually, we have not seen any linkage between the HESES data audits and the work of internal audit from August 2004 July 2008. From the HEFCE audits and the knowledge within the University at the time, it is apparent that there are fundamental issues around the identification of full and part time students, timeliness and accuracy of data and integrity of the HESA/HESES returns.
- 9.3.1 The Internal Auditors provided reports to the Audit Committee in each of 2005/06, 2006/07 and 2007/08 on the student admissions and student enrolment systems. The reports provide assurance on these systems but the scope and detail are insufficient to provide adequate assurance on the whole system, and in particular the processes to prepare HESA and HESES returns (as evidenced by the data audit findings by HEFCE covering non-completion rates in 2005/06 and in Sections 6/7 above).



- 9.3.2 We confirmed, by enquiry with the Head of Internal Audit, that the Internal Audit reports do not cover the HESA returns and never went beyond the HESES census date of 1 December each year
- 9.3.3 There is a significant gap in the audit coverage and as a result, a total reliance on management.
- 9.3.4 We believe that management (through the designated officer) should have engaged more openly with Internal Audit.
- 9.3.5 Governors (particularly the Audit Committee) should have pursued the references, minuted in Board meetings, from management to 'HEFCE correspondence' more vigorously and the Audit Committee should have instructed Internal Audit to follow up appropriately.
- 9.4 Nowhere within any of the Board or committee papers that we have reviewed is there a discussion around the risks of the University's practice with regard to non-completions compared to HEFCE rules in the area (pre-2007 this issue was discussed under full time/part time classification of mode of study and module loads).
- 9.5 In a letter from HEFCE to the Vice Chancellor of 12 September 2005, covering the audit of HESES04, they state:-

"The audit findings are dealt with individually in the report. A number of students were found to have been included as full time as opposed to part time in both the forecast and current student populations. If these and some other minor discrepancies noted during the audit are applied to the current HESES04 return a further decrease of £1,164k in base line grant for 2005/06 is implied".

Please copy this report [HEFCE Audit of HESES04] to the University's Audit Committee. The Committee may wish to make arrangements to receive updates on progress for itself".

The report went to the next Audit Committee on 9 November 2005 though we have seen no evidence of requests for further updates on progress.

9.5.1 The letter was accompanied by the HESES04 Audit final report. The first paragraph of the HEFCE HESES04 Audit report states:-

"This is the second year in succession that an audit of the HESES return has been undertaken. Some problems identified in the previous audit regarding the incorrect classification of the mode of attendance and the proportion of students leaving prior to 1st December included in the return still give cause for concern".



- 9.5.2 The main errors were highlighted as:-
 - (a) Student withdrawals prior to 1 December;
 - (b) Students enrolling for a single semester included as full time;
 - (c) Forecast numbers of PT students included in FT forecasts;
 - (d) Sandwich year out students included as full time;
 - (e) Students writing up included as part time;
 - (f) Incorrect price groupings;

The report also noted:-

- (g) The initial assessment of the effect of adjustments to HESES04, of elements (b) to (e) above, is a downward adjustment of £4,995,000;
- (h) There were a number of instances of full time students with very low levels of activity both in terms of attendance and module load;
- (i) The report concludes that "there is still a need to improve the reliability and timeliness of the data recorded within SITS particularly in relation to the current enrolment status of students".
- 9.5.3 The report was introduced through a covering note from the Director of Finance, which included:-
 - "Their [HEFCE's] visit identified a number of areas where the assumptions and student classifications used by the University are no longer acceptable to HEFCE. The main item concerned the treatment of some students as full-time, rather than part-time. This arises, for example, where students originally enrol as full-time but subsequently do not take a sufficient number of modules to be classified as full-time under the HEFCE definitions".
- 9.6 In the HESES04 Audit, HEFCE captured one of the main areas of weakness in the data registered full time students not undertaking sufficient modules to be classified as full time (9.5.2 h) but instead of pooling these under 'non-completions' noted the issue.
- 9.7 HEFCE should have been more explicit on non-completions within the documentation they issued to the University, though it is clear from 9.5.3 that the issue was discussed in their de-briefing with the University.
- 9.7.1 The University should have investigated the extent of non-completion rate in 2004/05 further and in particular to inform the assumptions for the 2005/06 HESES as we believe that there is a reasonable likelihood that the extent of non-completions would have been found to be similar to those identified in 2006/07.



9.7.2 The scale of this issue in 2006/07 is significant (see Section 6.5) and the University's processes were not robust enough to capture this issue.

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- 9.7.3 The statement by the Director of Finance clearly shows that the University understood that some student classifications were erroneous and that this treatment was unacceptable.
- 9.7.4 It is evident from the 2006/07 data audit (Section 6.5) that this issue had not been addressed. The total non-completion rate for all full time undergraduates on BDO's interpretation of HESES (Basis 1) is 43% (estimated in HESES06 by the University at 2.5%).
- 9.7.5 The total lack of correlation between the estimates (all other non-completion estimates are significantly flawed, Section 6) and reality was critical to the University and, although it was recognised as an issue by management in November 2005, it was not sufficiently followed through in either student number monitoring or financial modelling.
- 9.7.6 Enrolling students as full time without any later correction in their mode of study is a major factor in the 'non-completion' rates and resultant financial over-claims by the University.
- 9.8 The University continued to recognise students as full time completions in 2006/07, when in fact almost one in two first year undergraduates (48%) failed to complete a sufficient number of modules to qualify for funding when applying the HESES Regulations.
- 9.8.1 Nowhere between the statement made by the Director of Finance in November 2005 (9.5.3) to at least the end of 2007 is it evident that the University followed through in identifying the extent of the issue on non-completions/low module load full time students.
- 9.9 From the HESA return for 2007/08 (4.7.1) and Section 8, it is clear that the University has not been working with a realistic view on its fundable student population.
- 9.10 The adjustment of £5m (9.5.2g) is significant to the University and does not appear to be have followed through by the governors.
- 9.10.1 The adjustment for 2006/07, on a HESES compliant basis, is in excess of £15m. If the governors had realised the extent of the issue at the time it is unlikely that they would have taken the decisions that they did.
- 9.10.2 This is a recurring theme and governors alerted, in November 2005, to issues critical to the University that have not appropriately followed up year on year.



- 9.10.3 Management, and governors, were aware of the main issue of full time students being claimed for, exacerbated by the application of the Institution's Academic Regulations enabling progression based on only 75% of modules being taken and passed (which was know by the executive to be inconsistent with the definition of completion in the funding regulations).
- 9.10.4 The University should have revisited and applied the HESES rules.
- 9.11 On 25 October 2004 the Vice Chancellor received a letter from HEFCE with regards the HESES03 return. The letter notes:-
 - "the data supplied with your response letter indicates a large number of full time students each with considerably less than a full time load"
 - Within a section on Students' Mode of Study, the letter states "..this is an error rate of over 4% which we consider to be material and requiring further attention"
- 9.11.1 In November 2004, papers from HEFCE (covering letter and annexed to it the Audit of HESES 2003 return) expressed concerns over the reliability of data recorded on the student record systems.
- 9.11.2 These papers were not made available to the Audit Committee. The Vice-Chancellor was in attendance at both the November 2004 and February 2005 Audit Committee meetings (the two meetings after HEFCE's issue of the Audit of HESES 2003).
- 9.11.3 In the meeting of 10 November 2004, the Audit Committee agreed their annual opinion to the Board. Had they seen the letter and annex from HEFCE they may have formed a different opinion.
- 9.12 A number of issues raised in the 2003-04 and 2004-05 HESES data audits are repeated in our findings. For example, from HESES04 (9.5.2):-
 - (a) Student withdrawals prior to 1 December
 - (b) Students writing up included as part time
- 9.12.2 Both HESES03 and HESES04 audits express concerns over the reliability of the data – our work on HESES06 and HESA 2007/08 demonstrate that the data presented by the University to HEFCE and HESA has been unreliable.
- 9.13 The University has not put in place robust and systematic controls to eliminate the errors previously raised.
- 9.14 Not only have issues not been addressed but the overall data integrity, which has been regularly challenged by HEFCE, is demonstrably so poor that it should not have been relied upon.



- 9.15 It is clear that on a number of occasions (spanning 2004-2007), the Vice Chancellor has not presented letters from HEFCE to governors and in particular the Audit Committee that ought to have been disclosed (the Terms of Reference of the Audit Committee include receipt of reports from HEFCE), though they do appear to have been discussed with the Executive.
- 9.16 The Vice Chancellor (and on occasion members of the senior executive) was present at a number of governor meetings (committee and full board) when pertinent information was not made available.
- 9.17 Members of senior management were aware of the specific data issues arising from the HEFCE data audits and did not seek to bring the underlying risk and budgetary matters to the attention of the governing body other than through the Vice Chancellor.
- 9.18 There is a lack of transparency on the data audit findings between the Vice Chancellor (and senior management) with the Audit Committee.
- 9.19 Governors, at the full Board on 20 June 2007, were made aware of 'HEFCE correspondence'.
- 9.20 The Audit Code of Practice at the time notes that the Audit Committee's Annual report should consider "any HEFCE Assurance Service or other relevant evaluation".
- 9.21 The matter of 'HEFCE correspondence' was not followed up at the Audit Committee meeting and there is a notable lack of governor enquiry, relying on management statements on the extent of the findings.
- 9.22 Given that income is inextricably linked to student numbers, the Finance & Human Resources Committee should have confirmed that the matters arising at the Board had been followed through (in detail by the Audit Committee) and been properly briefed on the financial implications.
- 9.22.1 Both the Audit Committee and the Finance & Human Resources Committee should have pursued their responsibilities more effectively in this area as part of the governance of the University.
- 9.22.2 The overall governance at the University in relation to data issues was not effective.



- 9.23 The internal audit report on Enrolment details:-
 - (a) Review of Student Systems Enrolment Report 06/07 07, issued 21 May 2007
 - (b) Terms of reference were agreed with the Director of Academic Administration in February 2007 and a discussion report issued on 24 April 2007.
 - (c) The review included within its scope inter alia:-
 - To ensure that the University policies and procedures relating to the management and administration of student records are complete and comprehensive, and comply with statutory requirements
 - To ensure that student data is accurately and completely captured at the enrolment stage and is properly validated at all data capture points, and that all electronic records can be supported by originating documentation.
 - To ensure that student records are subject to routine reconciliation and validation against reliable baseline data and other interdependent systems

9.23.2 The report concludes:-

'The student enrolment process and the supporting systems for enrolling students to the University, enabling the collection of student fees and managing student records are sufficiently effective to ensure that all student fees income due is invoiced and that accurate and complete student statistical information is reported to external bodies aligned to statutory reporting requirements'.

- 9.23.3 Weaknesses were observed in the following areas:-
 - (a) Retention and archiving of enrolment papers (eg ID, evidence of fee status)
 - (b) Students with no enrolment forms
 - (c) Non-compliance with University procedures
- 9.23.4 Although the University undertook to emphasise compliance with the University's documented enrolment procedures for the 2006 enrolment they failed to ensure the ongoing integrity of the data through the year.
- 9.23.5 It is worth noting that non-completions are not highlighted within the recommendations from Internal Audit for the University (the scope of work, as defined with the Director of Academic Studies, was limited around the HESES return).



- 9.23.6 We do not believe that there was a sufficient evidence base to conclude on the accuracy and completeness of the student statistical information in compliance with HEFCE guidance (a prima facie contradiction given the results of the 2006/07 data audit, see Sections 6&7).
- 9.23.7 The Internal Audit report does not express an opinion on compliance with statutory requirements. There is no evidence in the report that internal audit has tested the University's definition of non-completion against the HESES guidance.
- 9.23.8 We have not reviewed the internal auditor's working papers in this area.

Conclusion

9.23.9 Following the HESES 2003-04 and 2004-05 data audits, insufficient work has been done by the University to ensure the integrity of the subsequent HESES and HESA returns.



- 10 Identify the audit trail behind the key decisions taken by the university on noncompletions issues over the last five years, including how its HESES estimates were arrived at, and summarise the evidence
- 10.1 We have asked the University on a number of occasions to 'document the key decisions for each of the last five years, including how the HESES estimates were arrived at each year, supported by an evidence base'.
- 10.1.1 We have based our findings on a review of all papers submitted to us by the University, and a review of board papers (main board and two committees Finance & Human Resources Committee and Audit Committee).
- 10.2 The University was operating blindly with non-completions running at a rate of 43% (Basis 1) in the undergraduate and foundation degree student population in 2006/07 (see Section 6.5) and key decisions were being made in the absence of solid facts.
- 10.3 The integrity of the HESES return, including estimates, is critical in financial planning. For HESES returns prior to HESES08, the estimates of non-completions were based on HESA returns where the basis of determining whether a student had completed their programme of study was not in accordance with HESES Regulations. The consequence of this is that for academic years 2006/07 and 2007/08 the error is so fundamental as to undermine the budgets (see Section 6).
- 10.4 The Vice Chancellor and Governors agreed annual budgets and should have fully considered all major decisions in light of the funding implications, in accordance with the existing rules at that time.
- 10.5 It is clear that the financial assumptions on revenue were fundamentally flawed in 2006/07 and, it follows through clawback and a rebasing of core funding, from 2007/08. Consideration of HEFCE's data audit for 2005/06 is outside of the scope of our work but we believe that HEFCE should consider the implications of our findings in relation to their earlier work.
- 10.6 It is also clear that the Executive were aware of the underlying non-completion issues (demonstrably in November 2005, see Section 9.5.3) and did not take sufficient steps to identify the extent of the issue. In 2006/07 non-completions were running at a rate of 43% for all undergraduates and students on foundation degrees (Section 6.5.19). Even on Basis 2, the direct consequence of the non-completions is over claiming of funding in 2006/07 in excess of £15m.
- 10.7 The University sent us a copy of an email from October 2003 from the (former) Deputy Vice Chancellor, Planning and Resources to the Vice Chancellor (copied to a number of members of the executive team) headed "Approach to HESA".
- 10.7.1 The email goes into detail on progression in accordance with the University's regulations vs non-completion in accordance with HEFCE definitions and notes that the University's application is inconsistent with the funding definition.



- 10.7.2 Neither this email, nor any paper around this issue went to any of the governor committees at the time Finance and Human Resources Committee, Audit Committee or indeed the Board yet the decisions taken on the back of this are fundamental to the funding of the University.
- 10.7.3 The decision to continue with a different definition was not discussed with the Board.
- 10.7.4 Management should have put in place appropriate systems and processes to accurately record and measure the student population against the HEFCE funding definitions but consistently failed to do so.
- 10.7.5 Management has taken critical decisions on funding that should have been discussed at Board level as they have a material impact on the University.
- 10.7.6 Management presented a set of principles to governors to address retention in 2003 and, as of September 2008, are still talking about implementing similar systems and processes. Based on the failure to accurately identify students who are not actively engaging in their studies, and would therefore be expected to be later recorded non-completions, management have failed to implement adequate systems to date.
- 10.7.7 Governors have not pursued this and should have done so.
- 10.8 Key decisions taken by the University were taken within the accountability framework, which is defined under the Financial Memorandum between the University and HEFCE. The relevant Financial Memorandum (issued in July 2006) sets out the 'Responsibilities of the institution' as:-

10.8.1 "Stewardship

- (a) The governing body of the institution is responsible for ensuring that funds from the Council are used only in accordance with the 1992 Act, this memorandum and any other conditions that the Council may from time to time prescribe.
- (b) The governing body has a wide discretion over its use of public funds, and is ultimately responsible for the proper stewardship of those funds. Therefore it must ensure that it exercises its discretion reasonably, and takes into account any relevant guidance on accountability or propriety issued from time to time by the Council, the NAO or the Public Accounts Committee.



10.8.2 Designation of principal officer

- (a) The governing body shall designate a principal officer of the institution, who will normally be the head of the institution, and shall notify the Council whenever it designates such an officer. The designated officer will need to satisfy the governing body that the conditions in this memorandum are complied with, and may be required to appear before the Public Accounts Committee alongside the Chief Executive of the Council on matters relating to grants to the institution.
- (b) The designated officer shall advise the governing body if, at any time, any action or policy under consideration by the governing body appears to the designated officer to be incompatible with the terms of this memorandum. If the governing body decides nevertheless to proceed, the designated officer must immediately inform the Chief Executive of the Council in writing.

10.8.3 Financial management

- (a) The governing body of the institution must ensure that it has a sound system of internal management and control.
- (b) The governing body of the institution shall plan and conduct its financial and academic affairs to ensure that it remains solvent and that, taking one accounting period with another, its total expenditure is not greater than its total income."
- 10.9 Throughout 2006/07 (and indeed from October 2003, see Section 9.7) the designated officer knew that the application of the University's progression rules were more generous than the HEFCE funding rules. We have not seen any evidence that suggests that the designated officer drew governors' attention to the differences and the resultant financial implications at the time.
- 10.9.1 Regardless of the difference between the funding rules and the University's regulations in relation to progression of full time students, a large number of these students, particularly at undergraduate level, are not engaged in full time study.
- 10.9.2 In 2006/07, almost one in two first year students (48% of foundation and undergraduate levels, 6.5.19) at the University commenced on a full time course but, though lack of engagement with sufficient modules, did not meet the funding criteria yet the University estimated this group of students to be less than 3% of the student population.
- 10.9.3 As the estimate of non-completions was significantly understated, more than £15m of funding was incorrectly claimed in the University's HESES 2006/07 return.
- 10.9.4 Although the University's Academic Regulations allow students to change mode of study, we were not provided with evidence that this had been exercised in any instances in the student population looked at as part of the data audit.



- 10.9.5 The non-completion rates are self evident from the HESA/HESES reconciliation for 2006/07 whereby, for example, 43% of all full time undergraduates and foundation degree students returned as FUNDCOMP1 (completions) within the HESA return are actually non-completions in accordance with the funding rules. The University's estimate at the time (HESES 2006/07) was a non-completion rate of 2.5%.
- 10.9.6 The difference between the University's estimates on non-completion and the reality fundamentally undermines the credibility of management's forecasting and consequent budgeting arrangements.
- 10.9.7 The designated officer knew that there was an issue over non-completion rates at the University but did not take sufficient steps to identify the magnitude of the problem.
- 10.9.8 In presenting budgets for governing body approval, the designated officer and senior management should have reasonably anticipated, and monitored, the extent of withdrawals and impact of full time students not completing modules (and in many instances not participating in them) against the funding rules.
- 10.9.9 As a result, the designated officer has not provided adequate information to the governing body for them to base decisions on to ensure the solvency of the institution.
- 10.10 There is a fundamental incompatibility between the way the University was planning its affairs and the funding rules. Nowhere in the board papers have we seen representation from the designated officer providing sufficient information to the Board to enable the Board to take reasonable decisions to ensure that the University planned its affairs so as to remain solvent.
- 10.11 Senior management has consistently failed to recognise withdrawals of full time students through the data systems resulting in inadequate financial planning and budgeting.
- 10.11.1 Senior management (including the designated officer) knew there were significant weaknesses in the student numbers data, and its impact into HEFCE funding, and neither took appropriate decisive action nor engaged appropriately with the governing body.
- 10.11.2 We are concerned that the Vice Chancellor and responsible officers in his executive team, over a prolonged period, have not established a reliable base on which to properly plan the budgets and operations of the institution and advise the governors in accordance with the funding rules and brought these issues to the attention of governors.



- 10.12 In a letter from HEFCE to the Vice Chancellor of 4 April 2007, relating to the HESES05/HESA2005-06 returns, the letter advises:-
 - "we feel unable to finalise the current HESA 2005-06 exercise and have concerns as to the reliability of the forecast non-completion rates in both HESES05 and HESES06 which are based on the respective HESA re-creation exercises". HEFCE requested resubmission of the data once amended.
- 10.13 In July 2007, papers were again not presented to the Audit Committee, by the Vice Chancellor, which ought to have been disclosed.
- 10.14 The papers clearly fell under the remit of the Audit Committee for consideration, both within the express terms of reference and as a fundamental risk to the University. The papers are not recorded as having been presented.
- 10.15 At the same meeting, the internal auditors presented the results of their work on the student data systems and provided assurance on the systems. Their opinions are at odds with the HEFCE data audit findings and it appears that Internal Audit was not advised by management of the specific concerns raised by HEFCE that would have enabled them to more effectively plan their audits.
- 10.16 The Vice Chancellor was present at the committee meeting but did not raise any concerns.
- 10.17 We have not considered whether there has been a breach of the Financial Memorandum but given our concerns with:-
 - (a) the reliability of the data returns:
 - (b) weaknesses identified in the internal processes and controls; and
 - (c) the ineffectiveness at times of the senior managers and governors.

HEFCE should consider whether the data quality, internal control and financial management at LMU constitute breaches of the FM.



1 Annex, Scope of work

- 1.1 HEFCE has instructed BDO Stoy Hayward LLP, under the framework contract between the two parties (060306/110), to undertake an independent audit of student records at London Metropolitan University ('the University').
- 1.2 On 17 July 2008, we accepted the scope of work as set out in the letter from HEFCE to the University dated 15 July 2008.
- 1.3 Our role is to provide the professional services detailed in the agreed scope. Our duties and responsibilities shall be limited to the matters expressly referred to in the letter and as defined in the framework contract.
- 1.4 Please note that (unless otherwise agreed by us in writing) those areas of the Engagement for which we are not responsible include the following:
 - (a) providing legal or other specialist advice outside the scope of the Engagement;
 - (b) reviewing (or otherwise being responsible for) the services provided by any other professional advisers retained by you; and
 - (c) providing any other advice beyond the scope of the Engagement.
- 1.5 We are also not responsible for the appropriateness of commercial or strategic decisions taken by you (including any decision to proceed or not to proceed with a particular transaction or course of action).

Use of our advice or opinions

- 1.6 Any advice or opinions will be provided in writing and addressed to you, HEFCE. You may only rely upon them for the purposes for which they have been prepared. They may not be reproduced or distributed to any other party without our prior written consent (save that copies of our advice or opinions may be provided to your professional advisers on a need to know basis for purposes associated with the Engagement only).
- 1.7 Neither our advice or opinions nor any of the services provided pursuant to the Engagement are intended, either expressly or by implication, to confer any benefit on any third party and our liability to any third party is expressly disclaimed.