

The Academic Experience of Students in English Universities

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Introduction

- 1. In March 2006, with a grant generously provided by the Higher Education Academy, the Higher Education Policy Institute commissioned Opinionpanel Research to undertake a survey of first and second year students in English universities retained as panellists in their database. The survey focused on various aspects of the amount of teaching and private study undertaken by students and their levels of satisfaction and other attitudinal questions.
- 2. In October 2006, the report of the survey was published as *The academic experience of students in English universities*¹. This is referred to in the text as 'the 2006 report'. References to '2006' should be taken as applying to the 2006 report or the survey on which it is based.
- 3. The survey was repeated in March 2007 again with the help of generous support from the Higher Education Academy. Thanks are also due to Opinionpanel who again agreed to conduct the survey at cost price.

Confirmation of 2006 findings

- 4. One purpose of repeating the survey was to validate the general account of the English Higher Education sector provided by its predecessor. The results here are very clear. The very impressive degree of consistency between the 2006 and 2007 survey enables us to say that the quantitative indicators of learning and teaching provision in English universities at whole system and subject level provide an accurate picture of provision in English universities. Whilst care needs to be taken at lower levels of aggregation, it is now possible to say definitively that:
 - Students in English universities typically receive around 14 hours of tuition per week (a weighted average of 14.2 hours in 2007, 13.7 in 2006)
 - Subject variations are both wide and consistent. Students in clinical and veterinary subjects typically receive just over 20 hours teaching per week; at the other extreme students in historical and philosophical studies typically receive between 8 and 9 hours.
 - The average student spends roughly 13 hours on private study (12.7 hours in 2007; 13.1 in 2006)
 - The total workload of English students averages around 25.5-26 hours (25.5 in 2007; 26.0 in 2006).
 - For students of medicine and dentistry, first and second year study is the equivalent of a full-time job at over 35 hours; for others it resembles part-time employment. Students of mass

¹ Available at www.hepi.ac.uk

- communications and documentation averaged 19.9 hours in the 2006 survey and 20.3 hours in 2007)
- Students at old universities (Russell Group and pre-92 institutions) often receive most of their small group teaching from nonacademics². This pattern is not evident in newer universities.
- 5. These conclusions provide a basis on which to
 - Compare the English sector with other countries for which similar data have been collected
 - Place the quantitative data in the context of the conclusions of the academic literature on teaching and learning
 - Relate the results of the HEPI surveys to the findings of the National Student Survey – the definitive source of information on student satisfaction

Availability of raw data

6. Having confirmed the validity of the survey based approach to quantifying academic provision in England, HEPI is now releasing the raw data on which this report and its predecessor are based.

Comparisons between 2007 and 2006

- 7. In the 2006 survey, weightings were employed to prevent subject and year effects from biasing the results. In 2007, for the sake of simplicity, these have not been employed in quite the same way. Where it is most important to do so we have weighted for subject effects. There is no weighting for year effects in the 2007 results (i.e. to distinguish between first and second year students). The text and footnotes indicate where weightings have been used and highlights cases where the fact that they have not been used may be significant.
- 8. A further complication is that most of the questions have been modified slightly and some have been substantially redrafted. (The questionnaire, reproduced at Annex A, can be compared with the 2006 questionnaire available as Annex A to the 2006 report.) For these reasons it would not be appropriate in this report to provide a commentary on how English higher education has changed between 2006 and 2007 on the basis of a comparison between the two surveys the changes observed are, in most cases, very slight and could have been caused either by random variation or changes in the approach or a combination of the two.
- 9. Notwithstanding the above, there are good grounds to regard the similarity between the 2006 and 2007 results as validating the general

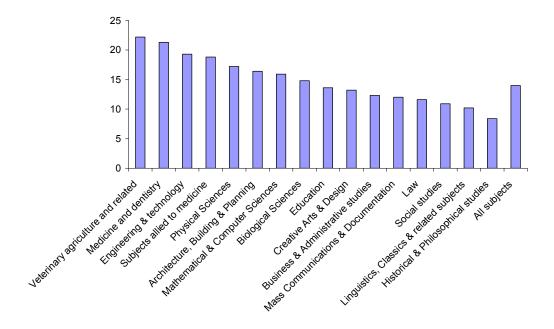
² Or in some cases from 'pre-academics' – post-doctoral students beginning an academic career.

approach to the survey. The consistency between the 2006 and 2007 results suggests that students are able to recall details of their previous term's work with sufficient accuracy to provide meaningful results. This point is discussed in detail in Annex B.

Hours of teaching

10. Students were offered a weighted mean of 14.2³ hours of teaching per week. As in 2006, the highest levels of teaching were evident in health science and engineering subjects, the lowest in social science and the humanities. The three subjects with the lowest hours of teaching (historical and philosophical studies, linguistics and social studies) had less than half the level of teaching of the most heavily taught subject (veterinary and agricultural science).

Figure 1: Scheduled hours per week by subject area⁴



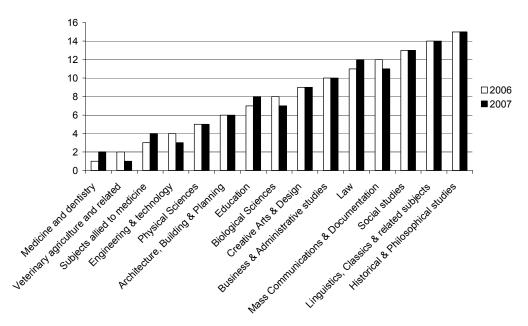
11. There is an impressive consistency between the 2007 results and those of the 2006 survey. Figure 2 shows the subject groupings used in the survey ranked in order of the mean number of scheduled hours in

³ Weighted total reflecting differences in the subject profile between the achieved sample and the HESA population of undergraduate degree students. Our sample is overwhelmingly (96%) but not exclusively studying for first degrees. The remaining 4% are studying for other undergraduate qualifications.

⁴ The subject areas analysed in this report are standard HESA classifications. Nevertheless these group a number of disciplines within a subject that might have different characteristics, though that is unlikely materially to affect the conclusions in this report. In 2006, the figure for 'all subjects' was weighted to reflect the distribution of students between subjects in the HESA population. That has not been done on this occasion.

2007. It is immediately apparent that the 2006 results painted a very similar picture.

Figure 2: Subject groupings by rank order of mean scheduled hours $(highest = 1)^5$



12. In 2006, the survey found that the amount of teaching in old and new universities was broadly similar (13.7 hours in old and 13.3 in new). For the 2007 survey, the two categories have been split – old universities into Russell Group and non-Russell Group institutions and new universities into post 92 universities and other institutions. The raw average (mean) for Russell Group institutions at 15.2 is much higher than the mean for other pre-92 institutions and post-92 universities (both are at 13.5). However, this inevitably reflects the concentration of the subjects with the highest levels of teaching input – science and medicine – in Russell Group universities. The weighted figures given in Table 3 below give a truer idea of the size of the 'type of institution' effect.

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 $^{^{\}rm 5}$ Excludes maths and computing which were separate subjects in 2006 and merged for 2007

Table 3: Mean scheduled hours of teaching by institution type⁶

	All universiti	Russell		Pre 1992 (not	
Subject	es	Group	Post 1992	Russell)	Other
Medicine and dentistry	21.3	21.3	22.6	20.7	n/a
Subjects allied to medicine	18.8	19.3	18.6	19.3	15.7
Biological Sciences	14.8	16.3	13.8	14.8	11.7
Veterinary agriculture and related	22.2	26.4	14.6	14.6	27.9
Physical Sciences	17.2	18.9	14.4	17.1	n/a
Mathematical & Computer Sciences	15.9	17.1	14.4	16.3	15.6
Engineering & technology	19.3	20.4	16.4	20.2	n/a
Architecture, Building & Planning	16.4	16.1	16.5	16.6	n/a
Social studies	10.9	10.8	11.5	10.4	11.6
Law	11.6	11.8	11.5	11.6	n/a
Business & Administrative studies	12.3	13.3	11.9	12.5	11.5
Mass Communications & Documentation	12.0	11.8	12.3	12.2	9.6
Linguistics, Classics & related subjects	10.2	10.8	10.2	9.8	9.0
Historical & Philosophical studies	8.4	8.0	9.3	8.1	10.4
Creative Arts & Design	13.2	10.7	14.0	12.4	13.5
Education	13.6	9.5	13.9	11.2	14.3
All ⁷	14.2	14.4	13.7	14.0	n/a

Unattended teaching

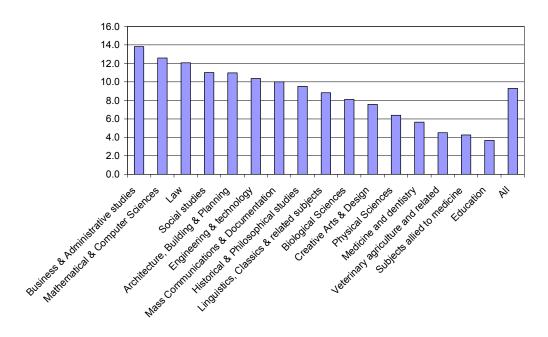
- 13. By subtracting the hours of teaching attended from the number of scheduled hours, it is possible to derive a measure of the proportion of teaching sessions not attended by students. In both 2006 and 2007, students reported non-attendance rates of less than 10 per cent.
- 14. It is to be expected that different subjects have different rates of non-attendance as this will reflect the extent to which all courses are mandatory. In fact, the range is not particularly wide with all subjects having reported non-attendance rates below 14 per cent.
- 15. While there may be little value in trying to identify trends from a comparison of 2006 and 2007 data, nevertheless, the consistency of the two years' results suggests that the general pattern found in 2006 was accurate. Looking at the ranking of subjects as shown in Figure 4, the consistency between 2006 and 2007 results is very striking. In 2006, the five subjects in which the highest proportion of scheduled teaching was not attended were computer science, business and administrative studies,

⁶ Please see Annex F for details on the extent to which differences between subjects are statistically significant.

⁷ Weighted totals. See footnote 3. The numbers of students in 'other' institutions were too small to permit the calculation of credible weighted totals.

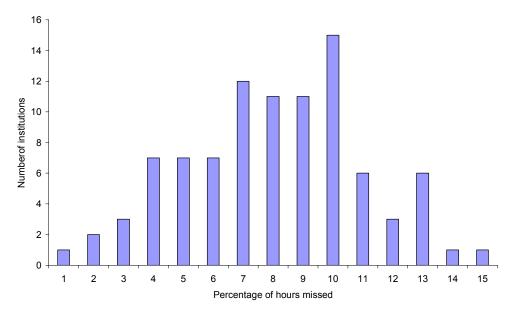
social studies, mathematical science and law. In 2007 the same five subjects occupy the top four places (maths and computing have been merged for 2007, meaning that they occupy only one place between them). Perhaps unsurprisingly, as in 2006, education, veterinary science, medicine and subjects allied to medicine occupy the bottom four places. A plausible explanation for this is that the role of powerful licensing and/or commissioning authorities in curriculum design means that very little of what is taught is either superfluous or optional.

<u>Figure 4: Percentage of scheduled hours of teaching not attended - by subject area</u>



16. As Figure 5 shows, in most (82 per cent) institutions the mean proportion of unattended hours is between 4 per cent and 11 per cent.

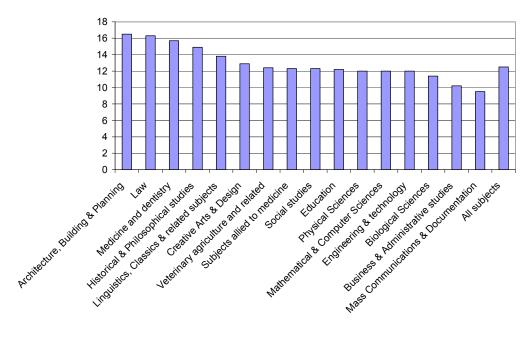
Figure 5: Percentage of scheduled hours not attended⁸ - by institution



Private study

17. In 2006 we reported that the weighted⁹ mean amount of private study was 13.1 hours per week. In 2007 it was 12.5 hours.

Figure 6: Hours of Private Study by subject¹⁰



 $^{^{8}}$ Institutions with more than 10 responses only. These results are not weighted as the numbers in the subject*institution cells are too small

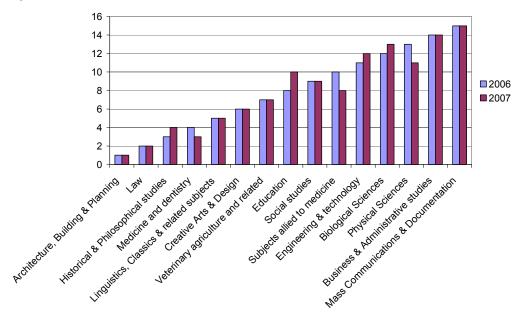
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 $^{^{\}rm 9}$ Results were weighted to reflect differences in the prevalence of subject groups between the survey and the HESA population

¹⁰ Unweighted data

18. The data on hours of private study once again offers strong evidence that the survey approach provides good data at these levels of aggregation. If students were unable to estimate the occurrence of unstructured occasions (such as private study) with sufficient accuracy to enable surveys such as this one to provide useful information, we would expect to see considerable variation between 2006 and 2007 in the rank order of subjects. As Figure 7 shows, this has not happened.

Figure 7: Subject groupings by rank order of mean private study (highest =1)¹¹



Effect of gender

19. As in 2006, there appears to be an association between gender and attendance and between gender and private study, as Table 8 shows.

Table 8: Private study and unattended hours of teaching by gender 12

	Hours of private study	Percentage of hours unattended
Male	11.7	11.0
Female	13.3	7.4

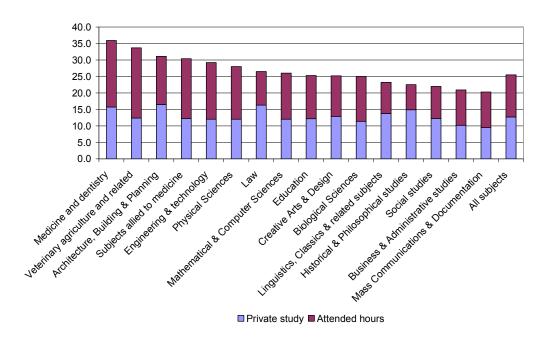
 $^{^{11}}$ Excludes maths and computing which were separate subjects in 2006 and merged for 2007

¹² Unweighted figures – see footnote 7.

Total workload

20. In the light of what has already been said about the similarity in hours of teaching and private study between 2006 and 2007 it is unsurprising that Figure 9 (which shows total workload – attended hours plus private study) looks very similar to the equivalent chart in last year's report with an overall weighted mean of 26.0 hours compared to a weighted mean of 25.7 hours in 2006 and with scientific and health related subjects, together with architecture, showing the highest workloads.

<u>Figure 9: Student workloads: hours of teaching plus private study – by subject¹³</u>



21. Students in Russell Group universities spent more time on average on their studies than others¹⁴. Their mean workload (attended hours of teaching plus private study) was 28.2 hours compared to 24.5 for other pre-1992 institutions and 24.1 for post 1992 universities. These figures are of course, influenced by the subject mix – medical and scientific subjects, which have high workloads, are concentrated in Russell Group institutions. Even the weighted means shown in Table 10 below, however, show evidence of a small 'Russell Group effect' albeit a less dramatic one than the raw figures suggest.

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¹³ Unweighted figures – see footnote 7

¹⁴ Even within Russell Group institutions, it is remarkable how consistently Oxford and Cambridge appear to require more effort of their students than other universities. On the other hand, they have fewer weeks in the academic year than other universities, so the extent to which this is so may be exaggerated by these results.

Table 10: Total workload (hours) by subject and type of institution¹⁵

	All	Russell	Post		
Subject	universities	Group	1992	Pre 1992	Other
Medicine and dentistry	35.9	36.1	33.5	36.0	n/a
Subjects allied to medicine	30.4	30.2	31.2	29.6	28.1
Biological Sciences	25.0	26.7	23.8	25.0	22.6
Veterinary agriculture and related	33.7	37.7	24.0	24.4	41.6 ¹⁶
Physical Sciences	28.0	30.3	24.5	27.4	n/a
Mathematical & Computer Sciences	26.0	28.6	23.3	26.0	20.9
Engineering & technology	29.2	30.2	26.9	29.6	n/a
Architecture, Building & Planning	31.1	33.3	29.8	31.3	n/a
Social studies	22.0	23.7	21.8	21.0	22.3
Law	26.5	31.4	23.2	25.4	n/a
Business & Administrative studies	20.9	22.6	20.1	21.3	21.8
Mass Communications &					
Documentation	20.3	20.1	20.7	20.2	17.4
Linguistics, Classics & related subjects	23.2	25.0	21.7	22.8	19.0
Historical & Philosophical studies	22.5	24.7	19.8	21.1	24.6
Creative Arts & Design	25.2	24.4	26.0	23.0	24.0
Education	25.3	21.4	25.5	22.8	26.7
All subjects ¹⁷	26.0	26.7	24.3	24.8	n/a

- 22. The findings outlined in the previous paragraph should not be overstated. As in 2006, the variation between individual institutions is very much greater than the variation between types of institution, suggesting that the differences between universities of the same type are at least as important as the differences between types of institution. Table 11 shows this very clearly, and summarises the information at Annex E which contains tables that show for each subject the average number of hours of total workload in each institution.
- 23. Annex E also shows the number of "good" (2:1 and above) degrees awarded, by subject and institution, along with the average number of UCAS tariff points of their entrants. It is clear from this that in some subjects and in some universities it is much more difficult to obtain a good degree than in others students need to have better entry qualifications and work harder.

¹⁵ Please see Annex F for details on the extent to which differences between subjects are statistically significant.

¹⁶ The Royal Veterinary College is technically a new institution (in the sense of being new to the HE sector) without university status and has been coded as 'other' here - although it has more affinity with the older veterinary schools in Russell Group universities. In such a small subject, the inclusion of the RVC will have a strong impact upon the outcome.

¹⁷ Weighted figures. See footnotes 3 and 7.

- 24. Last year's report observed that "In particular it raises questions about what it means to have a degree from an English university, if a degree can apparently be obtained with such very different levels of effort. Some institutions award many more 2.1 and first-class degrees than others, and there are subject differences too. Explanations for this might be that the students concerned are more able, or else that they work harder... On the basis of these data, neither of these explanations appears to provide a complete answer". That observation remains true.
- 25. Others have pointed out that the degree classification system does not provide a basis for comparing degree standards, and this report adds weight to that conclusion: it certainly raises questions that need to be addressed. Since last year's report, the Burgess Committee has completed its work, and is expected also to conclude that the degree classification system is no longer fit for purpose, but that identifying an acceptable alternative is a challenge. While these data certainly do not prove that the degree classification system is flawed, they nevertheless do raise questions that need to be addressed 18.

¹⁸ It should be noted though that a model developed by HEFCE analysts indicates that the distribution of degree classes in different institutions is more or less what would be expected taking into account gender, entry qualifications and disciplines. See HEFCE 2003/32 Schooling effects on higher education achievement and HEFCE 2005/09 Schooling effects on higher education achievement: further analysis - entry at 19 (www.hefce.ac.uk). It may be that a refinement of the HEFCE model to include data on student workload would reveal that some degrees require less work than others: the raw data shown in annex E does not in itself prove this but it suggests that the possibility is worthy of investigation. On the other hand, it should be noted also that a 1996 HEQC report Inter-institutional variability of degree results: An analysis in selected subjects appeared to show conclusively that differences in standard did exist between subjects and institutions.

<u>Table 11: Student workload by subject – highest and lowest institutional mean hours per week (average of 2006 and 2007)</u>

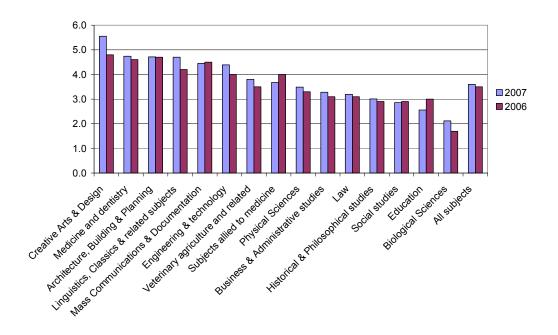
	1	T	
	Highest	Lowest	
	institutional	institutional	
Subject	mean	mean	Median
Medicine and dentistry	46.3	26.3	35.5
Subjects allied to medicine	38.3	24.6	31.2
Biological Sciences	39.9	15.0	24.5
Veterinary agriculture and related	41.6	23.5	37.0
Physical Sciences	45.3	19.8	27.6
Mathematical & Computer Sciences ¹⁹	36.4	17.1	26.2
Engineering & technology	41.2	20.8	28.7
Architecture, Building & Planning	41.5	26.3	28.5
Social studies	35.8	14.0	21.6
Law	44.8	18.7	26.2
Business & Administrative studies	28.3	15.5	20.8
Mass Communications &			
Documentation	26.8	14.7	19.4
Linguistics, Classics & related subjects	39.3	14.8	22.3
Historical & Philosophical studies	39.5	14.0	21.5
Creative Arts & Design	34.5	17.2	25.6
Education	33.7	14.4	25.5

Size of teaching groups

26. In 2006, we reported that students received a mean of 3.5 hours of teaching in small groups (with up to fifteen other students). As Figure 12 shows the 2007 results are very similar. The overall mean is 3.6 hours.

 19 For administrative reasons Mathematics and Computing are combined here, but shown separately in Annex E.

Figure 12: Amount of teaching in groups with 15 or fewer other students (in addition to the respondent) by subject area²⁰

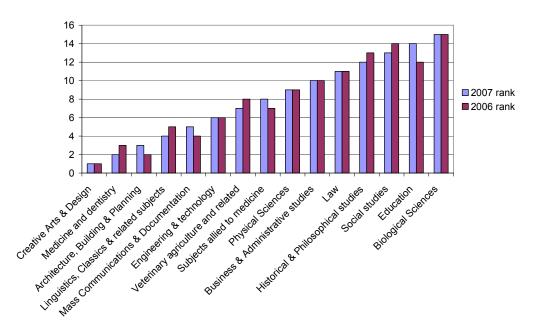


27. As Figure 13 shows, when subject groupings are ranked on the basis of the amount of small group teaching the 2007 result is very similar to the 2006 result.

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²⁰ Data for mathematical sciences and computer sciences are not shown but are consistent with the pattern evident in other subjects. In 2006 they were analysed separately. Mathematicians had a mean of 2.9 hours with 0-15 other students and computer scientists had 4.2. In 2007, the merged group had a mean of 4.7. The 'all institutions' figures for both years are weighted to reflect subject profile of the achieved samples.

Figure 13: Subject groupings by rank order of mean hours in groups with 0-15 other students beside the respondent (highest =1)²¹



28. In 2006, students at old and new universities reported similar amounts of very small group teaching (with 0-5 others) whilst new universities appeared to provide much more teaching in the 6-15 range (4.1 hours as opposed to 3.2 for old universities). This pattern is replicated in 2007.

<u>Table 14: Mean number of hours in small group sessions – old and new</u> universities²²

	0-5 others	6-15 others	0-15 others
All institutions	0.8	2.8	3.6
Russell Group	1.0	2.3	3.4
Other pre 92	0.5	2.5	3.0
Post 92	0.8	3.4	4.2
Other	0.6	3.1	3.7

Use of specialist academic facilities

29. In 2006, respondents were asked about supervised and unsupervised use of specialist facilities. For the 2007 survey, the questions were changed: students were instead asked to report how much of their teaching hours and private study involved the use of specialist facilities. The results are shown in Table 15 below.

²² Figures for 'all institutions' are weighted; others are unweighted.

²¹ Excludes maths and computing.

Table 15: Use of specialist facilities in taught sessions and private study

by subject

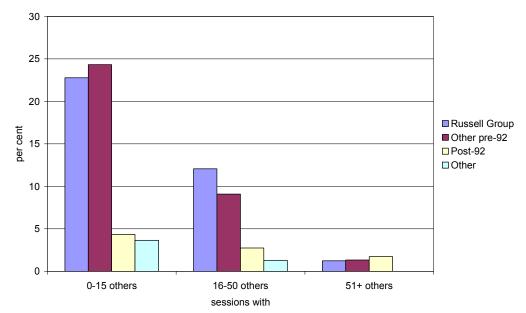
<u>by subject</u>			
	Tanahina	Private	Total
	Teaching	study	Total
Medicine and dentistry	6.2	1.3	7.5
Subjects allied to medicine	5.5	1.1	6.6
Biological Sciences	4.5	1.1	5.6
Veterinary agriculture and related	6.5	0.9	7.4
Physical Sciences	5.5	1.1	6.6
Mathematical & Computer Sciences	3.1	2	5.1
Engineering & technology	5.1	2	7.1
Architecture, Building & Planning	5.9	4	9.9
Social studies	1.2	0.9	2.1
Law	1	1.3	2.3
Business & Administrative studies	1.5	1.2	2.7
Mass Communications &			
Documentation	3.2	1.8	5
Linguistics, Classics & related			
subjects	1	1	2
Historical & Philosophical studies	0.6	0.8	1.4
Creative Arts & Design	5.8	3.4	9.2
Education	2.5	1.2	3.7
All subjects (weighted)	3.4	1.5	4.9

Teaching led by non-academics

- 30. One of the most striking findings of the 2006 survey was that 30 per cent of students in old universities reported that seminars and tutorials were led mainly by non-academic members of staff (the figures for new universities were much lower at 8 per cent for seminars and 7 per cent for tutorials).
- 31. Figure 16 shows that the general pattern is unchanged: students at Russell Group and pre-92 universities report much higher rates of teaching by non-academics, particularly where teaching groups are smaller²³.

 23 Or in some cases by 'pre-academics' – post-doctoral students beginning an academic career.

Figure 16: Percentage of respondents²⁴ reporting that seminars and tutorials were led mainly by non-academics

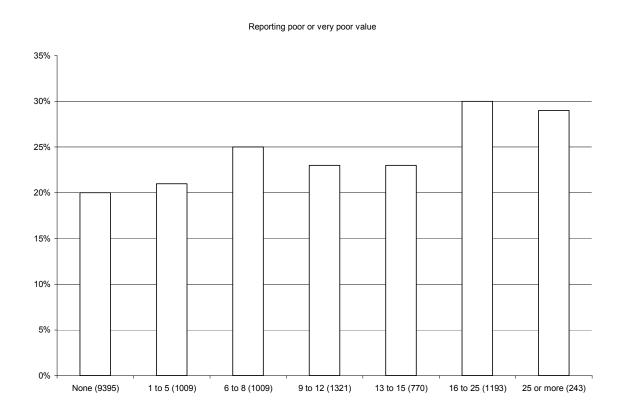


²⁴ Excluding 'don't know'.

Paid work

32. Figure 17 shows that students who do more hours of paid work not connected with their courses tend to perceive poorer value for money than those who do less. This finding was also noted in 2006. In neither year was the effect a particularly strong one.

<u>Figure 17: The impact of paid work on value perception: percentage</u> reporting poor value for money by hours of paid employment (numbers of responses in brackets)

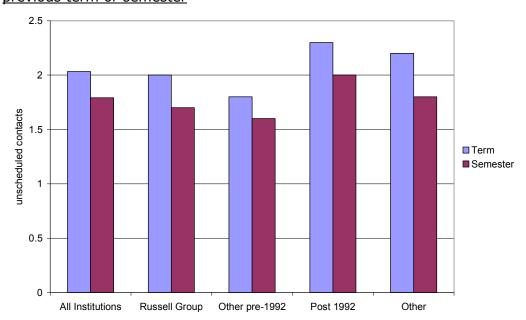


Informal tuition – discussions with staff outside scheduled teaching

33. In 2006 the survey asked about the frequency of substantive discussions with staff outside scheduled hours of teaching. For 2007, the survey shifted from using ordinal categories ('less than once a month', 'once a month' etc.) to asking students to estimate the number of unscheduled contacts. This gives us for the first time a measure of the amount of contact students had with staff.

34. As Figure 18 shows, the mean of 1.8 contacts is quite substantial²⁵. Assuming a ten week term this equates to 0.2 contacts per week. If each contact lasted half an hour and is on a one-to-one basis, this is equivalent in terms of staff time to an additional 10-person seminar each week - or ten 100-person lectures. Unscheduled contacts are likely to be highly skewed because they depend on the willingness of students to seek and obtain the attention of staff. It is probable, therefore that there is a minority of students for whom unscheduled contact adds very substantially to the amount of staff time invested in their teaching. This potentially raises issues of equity – it may be that a minority of more assertive students are gaining a considerable advantage through this form of informal tuition.

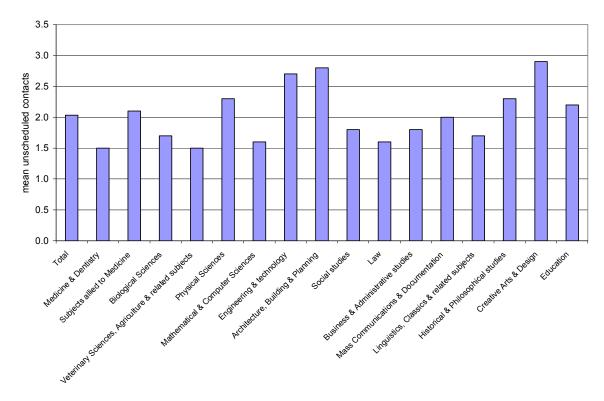
Figure 18: Mean substantive unscheduled contacts with academics in previous term or semester²⁶



35. Figure 19 below shows the variation between subjects in levels of informal contact.

²⁵ The survey actually asked about the number of contacts between the beginning of January and mid-March. ²⁶ Figures for 'all institutions' are weighted; others are unweighted.

<u>Figure 19: Mean substantive unscheduled contacts with academics in previous term – subject variations</u>²⁷

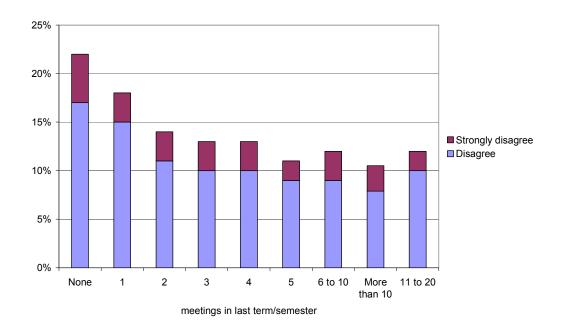


36. The 2006 survey showed a clear relationship between the frequency of unscheduled contacts with staff and satisfaction with access to staff. The same relationship is evident in the 2007 result. The new continuous scale reveals that the relationship weakens once students reach the level of two contacts suggesting that a moderate level of access to staff is sufficient to satisfy most students. Figure 20 shows this clearly.

²⁷ Figures for 'all institutions' are weighted

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Figure 20: Disagreement with proposition: "I feel I have sufficient access to an academic member of staff outside timetabled sessions in order to discuss aspects of my work" by frequency of unscheduled contacts



Expectations and reality

37. As Table 21 shows, most students are able to identify elements of their experience which are better and others which are worse than their initial expectations. As in 2006^{28} , the verdict leans strongly towards the positive with the proportion stating that their experience has been better than expected three times the proportion stating that it has been worse.

<u>Table 21: Has the reality of your experiences matched your expectations?</u>

It's been better	28%
It's been worse	9%
It's been better in some ways and worse in others	56%
It's been exactly what I expected	7%

38. Of the two thirds of students who were disappointed in some way nearly half (42 per cent) cited academic reasons. Table 22 shows this.

²⁸ This question has been rephrased for 2007. In 2006, respondents were given the option of saying that their experience had been 'broadly' what they expected rather than 'exactly' what they expected. Unsurprisingly this led to a higher number declaring that their experience matched their expectations.

²⁹ Excluding 'don't know'.

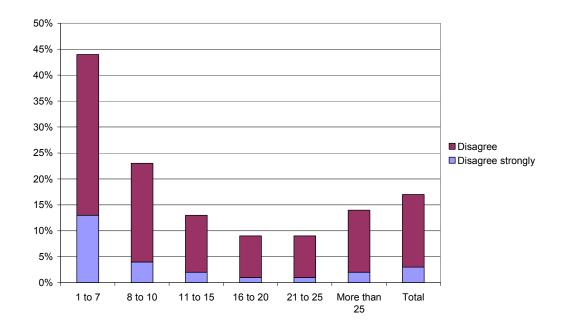
Table 22: If your experience has been worse than you expected, or worse in some ways, why do you feel this?³⁰

Your academic experience (e.g. course, staff, facilities)	42%
Your personal experience (e.g. social life, making friends)	32%
Other experience	26%

Does more teaching increase satisfaction?

39. The 2006 survey results showed that students with very low hours of teaching were much more likely to be dissatisfied with the amount of teaching they had received but also that students with unusually high teaching hours were also more dissatisfied than those with slightly above average teaching hours. Figure 23 shows clearly that the least dissatisfied students receive slightly more hours of teaching than the average³¹ but that, as was concluded last year, there is a point beyond which more teaching reduces satisfaction.

Figure 23: Disagreement with proposition: 'I am satisfied with the number of time-tabled classes I have had during this term' by scheduled hours of teaching per week



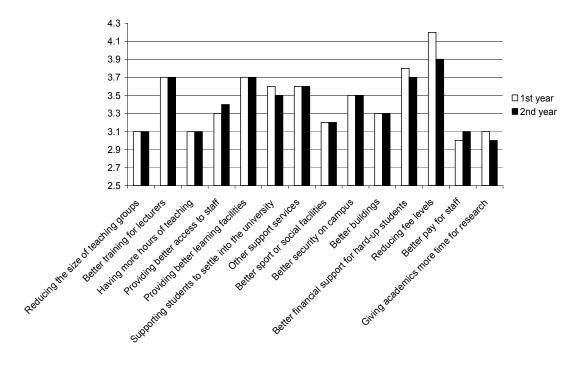
³⁰ Excluding "don't know".

³¹ The least dissatisfied receive between 16-20 hours per week, whereas, as reported in Table 3, the mean scheduled hours received is 14.2.

What should additional income be spent on?

- 40. The 2006 survey asked respondents to prioritise seven ways in which universities might spend additional resources obtained from charging higher fees. Students consistently rated inputs to the quality of teaching and learning (smaller classes and better facilities) as more important than increasing the amount of teaching.
- 41. For the 2007 survey, a revised list was used. In addition, respondents were asked simply to rate the importance of each option rather than to place them in rank order. The results are somewhat surprising. Students rate training for lecturers (which was not included in the 2006 options) much higher than smaller teaching groups suggesting that it is the quality of the teacher which concerns students more than the character of the teaching occasion. This finding may be related to the amount of teaching done by non-academics, but this has not been explored. Unsurprisingly, students' top priority is to reduce fee levels and this is also the category where there is the greatest difference between first year students (who are subject to the new fee regime) and second year students (who are not) as Figure 24 shows.

Figure 24: The effect of higher fees on priorities: preferences by year of study³²



 $^{^{32}}$ Mean levels of importance based upon a hypothetical scale of 1 to 5 where 5 = Extremely important, 4 = Very important, 3 = Quite important, 2 = Not very important, and 1 = Not at all important. Respondents were not presented with these numeric values.

Fees and student attitudes

- 42. The 2007 survey also offers an opportunity to investigate the impact of the new 'variable' fee regime. First year home and EU students in 2007 are liable to pay fees of up to £3000 per year but are allowed to defer payment until they are earning an appropriate amount whilst also being eligible for more generous support for maintenance. Second year students are subject to upfront fees of up to £1200 per year, depending on their parents' means.
- 43. The indications are that first year students rate the value for money of their courses less favourably than second year students although the effect is not dramatic. Given that value for money is an economic judgment, it is to be expected that as a product goes up in price, so perceptions of its value for money will reduce. Table 25 compares the value perceptions of first and second year students.

<u>Table 25: The effect of higher fees on value perception: value for money as rated by first and second year students³³</u>

	1st	2nd
	year	year
I have received very good value for money	8%	10%
I have received good value for money	34%	40%
I have received neither poor nor good value for money	34%	31%
I have received poor value for money	19%	15%
I have received very poor value for money	4%	4%

- 44. Looking at Figure 26 (below), it appears that higher fees have had a general effect upon the value perception of UK students, but not interestingly of EU students subject to the same regime. This suggests that the publicity given to the fees issue in the UK is more of a factor in students' value perceptions than the actual experience of the new regime. This would also explain why the proportion of second-year students (who are still paying the basic fee) reporting poor value for money is, at 19 per cent, higher than the proportion reporting poor value in 2006 (just over 15 per cent). These students have not been exposed to higher fees but they have been exposed to a large amount of commentary relating to fee increases.
- 45. Students from outside the EU will be paying the highest fees. Unsurprisingly, they continue to perceive the lowest levels of value for money, with more than a quarter (27 per cent) reporting poor or very poor value (barely changed from 2006).

-

³³ Excluding 'don't know'.

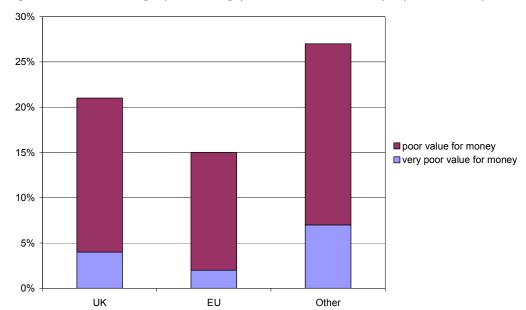


Figure 26: Percentage perceiving poor value for money by nationality

The value of non-academic activities

- 46. Table 27 below shows the percentage of participants in various non-academic activities who report that they have been helped 'a lot' to develop various skills. It is noticeable that paid work and volunteering seem to have the most positive effect on those who participate in them.
- 47. It is important to stress that the results shown in Table 27 are indicators of the presence of benefits from the activities listed; the presence of such benefits does not in itself prove that the activity is 'worth' the sacrifice of time and effort or that the overall effect is beneficial. That caution is particularly pertinent in the case of paid work which will often be entered into as a matter of necessity rather than choice. The findings with regard to paid work are interesting because the 2006 survey found a negative association between paid work and value perception and a small negative association between participation in paid work and levels of private study.

<u>Table 27: Percentage of respondents participating in various non-academic activities reporting that they have been helped 'a lot' to develop skills³⁴</u>

	Problem	Team			
	solving	working	Communication	Organisational	Confidence
Clubs and societies	22%	52%	57%	38%	57%
Music and drama	29%	61%	60%	40%	63%
Paid outside work	45%	68%	79%	58%	70%
Volunteering	44%	64%	74%	56%	68%

48. The findings in Table 27 are slightly misleading from another perspective because they do not reflect the very different levels of participation in each of the activities shown in the table. If we want to gauge the importance of each activity in developing students' skills it is perhaps more relevant to look at the percentage of the total response reporting 'a lot' of help with skills acquisition. It is striking that 32 per cent of the student body report that clubs and societies have helped them 'a lot' in developing confidence and communication skills, suggesting that universities' investment in student societies is a very effective means of contributing to the development of their students. Other activities, particularly volunteering and music and drama - whilst valuable to those who choose to participate - have a much less dramatic impact owing to lower levels of participation.

<u>Table 28: Percentage of all respondents reporting that they have been</u> helped 'a lot' to develop skills by various non-academic activities

	Problem	Team			
	solving	working	Communication	Organisational	Confidence
Clubs and societies	10%	28%	32%	20%	32%
Music and drama	1%	2%	2%	1%	2%
Paid outside work ³⁵	6%	9%	11%	8%	9%
Volunteering	1%	2%	2%	1%	2%

³⁴ Excluding 'don't know'.

Respondents were given the option to skip questions relating to each activity if they had not participated in that activity. The low figures for paid work in Table 28 reflect the very low numbers (14%) electing to do this. Given that 37% reported some hours of paid employment, this suggests that more than half of those with experience of paid employment elected not to answer this question. This rate of abstention is far higher than for any other question. Speculatively, this may reflect some alienation from the 'skills vocabulary' used by learning and development professionals: professionals and recruiters like to speak about 'problem solving' and 'communication' skills but it may be that undergraduates are less comfortable with this way of thinking about their skills.

Questionnaire

Q1a

How many hours of time-tabled sessions did you have scheduled in an average week during term-time?

Please include time spent in lectures, tutorials, seminars, supervised practical work - but not time spent working outside the university as part of your course, e.g. on a placement or a fieldwork trip.

Don't worry if you can't be precise, just try to give a reasonable average.
Q1aCheck You've said that you have <%~Q1a%> hours of time-tabled classes per week.
Are you sure that this is correct?
Yes, continue No, go back and change my answer
Q1b And about how many hours did you attend in the average week?
Q1bError Your number of hours attending, $<$ % \sim Q1b% $>$, is greater than your number of hours for time-tabled classes, $<$ % \sim Q1a% $>$.
Please click 'Back' to change your number of hours attending.

Q1c

Of the sessions you attended, roughly how many hours a week on average were spent using specialist facilities?

Just to remind you, you've said you attended approximately $<\%\sim Q1b\%>$ hours in an average week.

Please include e.g. laboratories, language resource centres, studios, theatres or specialist computing facilities - but not general IT facilities available to all students. Q1cError Your number of hours spent using specialist facilities, <%~Q1c%>, is greater than your number of hours attended in the average week, <%~Q1b%>. Please choose from one of the following options below. Change hours spent using specialist facilities Change hours attended in an average week Q2 To what extent do you agree with the following statement? "I am satisfied with the amount of time-tabled sessions I have had this year" Disagree strongly Disagree Neutral Agree Agree strongly Q3 Please think about the size of the various teaching groups you have attended this term / semester, e.g. lectures, tutorials, practicals, supervised fieldwork, etc. On average, roughly how many hours per week have you had with... 0-5 other students 6-15 other students 16-50 other students

The total above should be equal to your total hours for sessions attended, $<\%\sim q1a\%>$.

51-100 other students

More than 100 other students

Q3Error Your total number of hours spent with various teaching groups, $<\%\sim$ Q3sum $\%>$, does not equal your total number of hours attended in an average week, $<\%\sim$ Q1b $\%>$.
Please click 'Back' to change the number of hours attended with each teaching group.
Q4a Thinking about the teaching you attended during the current term / semester, who mainly led sessions where there were 0-15 other students beside yourself?
Don't worry if you can't be sure about numbers or if attendance was variable, just be as accurate as you can.
An academic member of staff such as a lecturer or professor A non-academic such as a research student, research assistant or laboratory technician Don't know / neither of the above
bon t know / neither of the above
Q4b Who mainly led sessions where there were 16-50 other students beside yourself?
An academic member of staff such as a lecturer or professor

An academic member of staff such as a lecturer or professor

A non-academic such as a research student, research assistant or laboratory technician

Don't know / neither of the above

Q4c

Who mainly led sessions where there were 51 or more other students beside yourself?

An academic member of staff such as a lecturer or professor A non-academic such as a research student, research assistant or laboratory technician

Don't know / neither of the above

.....

Q5 Students sometimes need to liaise with teaching staff to discuss work outside formal teaching time.
How many times have you done this since the beginning of this January?
If you can't remember precisely, please give us the best estimate you can. If you haven't done this, enter zero.
Q6 To what extent do you agree with the following statement?
"I feel I have sufficient access to academic staff outside timetabled sessions in order to discuss aspects of my work"
Strongly disagree Disagree Neither agree nor disagree Agree Strongly agree
Q7 In an average week during term-time, roughly how many hours have you spent on private study?
Please include time spent reading, researching, writing essays and reports, doing unsupervised laboratory work etc.
Don't worry if you can't be precise, just try to give a reasonable average.
Q7Check You've said that you do <%~Q7%> hours of private study per week.
Are you sure that this is correct?
Yes, continue

No, go back and change my answer

Q8 Of that private study, how many hours per week on average were spent working on specialist facilities provided by the university?
Please include time spent in laboratories, language resource centres, studios, theatres or specialist computing facilities - but not general IT facilities available to all students.
OSError
Q8Error Your total number of hours spent on specialist facilities provided by the university, $<\%\sim$ Q8%>, is greater then your total number of hours spent on private study, $<\%\sim$ Q7%>.
Please click 'Back' to change the number of hours attended with each teaching group.
Q9 In an average week during term-time, roughly how many hours have you spent working outside the university or college as part of your course?
Please include time spent on e.g. on placements, fieldwork trips, etc.
Q9Check You've said that you do <%~Q9%> hours of working outside the university or college as part of your course per week.
Are you sure that this is correct?
Yes, continue No, go back and change my answer
Q10a How many assignments did you hand in to be marked last term / semester?

Q10b Of these, roughly how many assignments were marked and returned to you?
Please enter the number of assignments returned to you
Q10bError The number of assignments that were marked and returned to you, $<\%{\sim}Q10b\%{>}$, is greater than the number of assignments that you handed in, $<\%{\sim}Q10a\%{>}$.
Please click 'Back' to change the number of assignments that were marked and returned.
Q11 In an average week during term-time, roughly how many hours have you spent in employment unrelated to your course?
Q12 Thinking back to when you applied to your current university, has the reality of your experiences matched your expectations? It's been better It's been worse
It's been better in some ways and worse in others It's been exactly what I expected Other/don't know
Q13 Which of the following have been better than you expected?
You may choose more than one.
Your academic experience (e.g. course, staff, facilities) Your personal experience (e.g. social life, making friends) Other experience

Q14

Which of the following have been worse than you expected?

You may choose more than one.

Your academic experience (e.g. course, staff, facilities) Your personal experience (e.g. social life, making friends) Other experience

.....

Q15 [asked of home students only] How much are you paying in fees? £1200 or less £1201 - £2999 £3000 £3001 or more

.....

Q15i [asked of international students only] How much are you paying in fees?

Up to £3000 £3001-£6000 £6001-£10000 £10001-£15000 More than £15000

Q16

Thinking of all the things you've been asked about in this questionnaire so far, which statement best describes your view of the value for money of your present course?

I have received very poor value for money $% \left(1\right) =\left(1\right) \left(1$

I have received poor value for money

I have received neither poor nor good value for money

I have received good value for money

I have received very good value for money

Q17BLOCK

Type Blockrotation

Blocks Q17

Items Code Description Condition

- 1 Reducing the size of teaching groups
- 2 Better training for lecturers
- 3 Having more hours of teaching
- 4 Providing better access to staff outside teaching sessions
- 5 Providing better learning facilities (e.g. IT, library or laboratory facilities)
- 6 Supporting students to settle into the university
- 7 Other support services (careers, accommodation etc.)
- 8 Better sport or social facilities
- 9 Better security on campus
- 10 Better buildings
- 11 Better financial support for hard-up students
- 12 Reducing fee levels
- 13 Better pay for staff
- 14 Giving academics more time for research

Routing Text1

Q17

Part of Q17BLOCK

Below is a list of things which a university might choose to spend money on.

Please rate how important you think each one is.

<%~_InclItem_%>

Extremely important Very important Quite important Not very important Not at all important

Q18

Finally, thinking about activities outside your academic work.

Which of the following activities have you been involved in during your time at university?

Clubs and societies Music and drama

Q18d

To what extent has volunteering helped you to develop useful skills?

Not at all A little A lot Not applicable Don't know

Problem solving skills

Team working skills
Communication skills
Organisational skills Confidence
Confidence
Q18e
To what extent has socialising helped you to develop useful skills? Not at all A little A lot Not applicable Don't know
Problem solving skills
Team working skills
Communication skills
Organisational skills
Confidence
Q19
Is your academic year based on a term or semester system?
Term
Semester
Other
Don't know
Feedback1
Would you like to comment on this questionnaire?
Yes
No
Feedback2
What did you think of this questionnaire?
EOQ
That's it - you've finished! Thank you for taking part.

This questionnaire took you <%~MinsTakes%> minutes to complete. You
earned 1 point worth £1 in Amazon gift certificates. You now have a credit of
<%~TPOINTS%> points in total.

Click	'Next'	to go	to ou	r home	page a	and r	manage	you	r accou	nt.
Your	userna	ame a	nd pas	ssword	are in	the	email v	we ju	st sent.	

Annex B

Validating the survey approach

1. The 2007 survey was not designed to be directly comparable with the 2006 survey. The validity of direct comparisons between the two is questionable for the following reasons:

- The 2006 results were generated using a weighting procedure which we have not attempted to replicate in 2007. The 2007 results report raw (unweighted) numbers.
- The questionnaire was revised in 2007. In some cases, questions
 were unchanged or very slightly altered but in others there is good
 reason to suppose that changes in wording will have influenced the
 responses.
- 2. Consequently it is inappropriate to draw any conclusion from the results about the way in which English higher education changed between 2006 and 2007.
- 3. Two of the most important survey questions have remained unchanged (or almost unchanged) and these have been used to ascertain whether there is sufficient consistency between the results to validate the 2006 results. These are the questions relating to the total scheduled hours of teaching and private study.
- 4. It is implausible that the tendency of some subjects to require more teaching and private study than others would change radically from one year to the next, so any such change would cast doubt upon the survey results. Conversely, a high level of agreement offers some prima facie evidence that the general picture painted by the survey results is accurate. If the level of randomness caused by students failing to remember correctly the characteristics of their academic experience was serious enough to undermine the main conclusions, we would expect a high level of disagreement from one year to the next. That this has been achieved between 2006 and 2007 suggests strongly that the survey approach and the results have a high degree of validity.

<u>Table 1: Questions asked about private study and hours of teaching in</u> 2006 and 2007

_	2006 question	2007 question
Hours of teaching	How many hours of time-tabled	How many hours of time-
	classes (e.g. lectures, tutorials,	tabled sessions have you had
	seminars, practicals etc.) have	scheduled in an average week
	you had scheduled, in an	during term-time? Please
	average week during term-time?	include time spent in lectures,
		tutorials, seminars, supervised
	Do not worry if you cannot be	practical work – but not time
	precise, just try to give a	spent working outside the
	reasonable average.	university as part of your
		course, e.g. on a placement or
		a fieldwork trip.
		Don't worry if you can't be
		precise, just try to give a
		reasonable average.
Private study	During term-time, on average	In an average week during
	about how many hours per week	term-time, roughly how many
	have you spent doing private	hours have you spent on
	study (e.g. reading, or producing	private study? <i>Please include</i>
	course work or essays)?	time spent reading,
		researching, writing essays
	Do not worry if you cannot be	and reports, doing
	precise, just try to give a	unsupervised laboratory work
	reasonable average.	etc.
		Dank warm if you and his
		Don't worry if you can't be
		precise, just try to give a
		reasonable average.

Overall averages

- 5. Across the entire response, the mean number of scheduled hours of teaching per week in the 2006 survey was 13.7. In 2007 it was 14.0.
- 6. The mean hours of private study per week was 13.1 in 2006 and 12.7 in 2007.

<u>Scheduled hours - ranking of subjects</u>

7. There is a very high level of agreement between the 2006 and 2007 surveys as to which subjects involve the highest levels of scheduled teaching.

8. This is unsurprising. It is reasonable to expect that students' ability to recall how many timetabled hours they had will be good (because those hours form part of a routine which they have had to learn). Therefore, it would be surprising if there was a random pattern to their responses.

Table 2: Rank order of subjects (highest scheduled hours of teaching = 1)

	2006 rank	2007 rank
	(of 17)	(of 16)
Medicine and dentistry	1	2
Veterinary agriculture and related	2	1
Subjects allied to medicine	3	4
Engineering & technology	4	3
Physical Sciences	5	5
Mathematical Sciences	6	7 ³⁶
Architecture, Building & Planning	7	6
Computer sciences	8	7 ³⁷
Education	9	9
Biological Sciences	10	8
Creative Arts & Design	11	10
Business & Administrative studies	12	11
Law	13	13
Mass Communications & Documentation	14	12
Social studies	15	14
Linguistics, Classics & related subjects	16	15
Historical & Philosophical studies	17	16

<u>Private study – ranking of subjects</u>

- 9. Much more impressive is the high level of agreement between the 2006 and 2007 survey on the amount of private study by subject. Private study is in most cases unstructured and therefore harder to recall.
- 10. If students were unable to estimate the occurrence of unstructured occasions (such as private study) with sufficient accuracy to enable surveys such as this one to provide useful information, we would expect to see considerable variation between 2006 and 2007 in the rank order of subjects. As Table 3 shows, this has not happened.

³⁶ Mathematical and computer sciences were 'merged' for the 2007 survey

³⁷ See footnote 1

Table 3: Rank order of subjects (highest amount of private study = 1)

	2006 rank	2007 rank
	(of 17)	(of 16)
Architecture, Building & Planning	1	1
Law	2	2
Historical & Philosophical studies	3	4
Medicine and dentistry	4	3
Linguistics, Classics & related subjects	5	5
Creative Arts & Design	6	6
Veterinary agriculture and related	7	7
Education	8	10
Social studies	9	9
Subjects allied to medicine	10	8
Computer sciences	11	12 ³⁸
Engineering & technology	12	13
Biological Sciences	13	14
Physical Sciences	14	11
Mathematical Sciences	15	12 ³⁹
Business & Administrative studies	16	15
Mass Communications & Documentation	17	16

³⁸ See footnote 1

³⁹ See footnote 1

Characteristics of the sample

- 1. The tables below give the composition of the 2007 achieved HEPI sample, and for the sake of comparison, the 2006 achieved HEPI sample and the 2004-05 HESA population.
- 2. As in 2006, males, newer universities (post 92 and 'other') and non-EU students are under-represented. Some progress has, however, been made on university type: it is notable that the 2007 survey achieved a much stronger response from post 1992 universities becoming far more representative of the total (HESA) population (see Table 3 below). On the other hand, the under-representation of non-EU students is more severe in 2007 than in 2006. Second year students were under-represented in 2006 and over-represented in 2007.
- 3. Form the point of view of the weighting procedures employed in this report, the subject breakdowns are the most important. In 2006, weightings were employed to correct for differences between the characteristics of those surveyed and of the total HESA population. This has not been done in the same way in 2007 and the similarity of the two years' results suggests that the impact of the unrepresentativeness of the sample upon the headline results is very minimal. Where weightings have been employed the difference between the raw and unweighted totals is generally very small.
- 4. For 2007 we have used the HESA population of undergraduate first degree students as the basis for establishing the subject profile of the comparable population. There are two things to note about this choice:
 - The achieved survey sample is 96 per cent first degree. The remaining 4 per cent are studying for other undergraduate qualifications. This is considerably closer to 100 per cent first degree than to the proportion of first degree students in the total 2005-06 HESA undergraduate population (1.24 million out of 1.68 million or 74 per cent). There is nevertheless a risk of a very slight bias if sub-degree students are different in important respects from degree students.
 - The HESA comparator population includes third year (and later year) undergraduates. The survey did not include these students.

Table 1: Subject breakdown

Subject	2007 survey	2006 survey	HESA population as given in 2006 report	HESA population used in 2007 weightings (2005-06)
Medicine and dentistry	4%	5%	4%	3.3%
Subjects allied to medicine	7%	5%	7%	9.5%
Biological sciences	10%	9%	9%	9.4%
Veterinary sciences, agriculture & related	1%	1%	1%	0.9%
Physical sciences	7%	7%	5%	4.5%
Mathematical and computer sciences	8%			7.7%
Mathematical sciences		4%	2%	
Computer science		4%	7%	
Engineering and technology	5%	6%	7%	6.5%
Architecture, building and planning	2%	1%	2%	2.6%
Social studies	11%	13%	9%	10.0%
Law	6%	6%	5%	4.9%
Business and administrative studies	8%	9%	15%	12.6%
Mass communications and documentation	2%	2%	3%	2.8%
Languages	9%	10%	6%	6.6%
Historical and philosophical studies	7%	7%	4%	5.2%
Creative arts and design	8%	6%	12%	9.5%
Education	4%	3%	3%	4.0%

Table 2: Gender breakdown

Gender	2007 survey	2006 survey	HESA population as given in 2006 report
Male	39%	41%	47%
Female	61%	59%	53%

Table 3: Type of institution breakdown

Type of institution	2007 survey	2006 survey	HESA population as given in 2006 report
Russell group	31%	37%	25%
Pre 1992	29%	30%	21%
Post 1992	37%	27%	49%
Other institutions	4%	6%	6%

Table 4: Nationality breakdown

	2007	2006	HESA population as given in 2006
Nationality	Survey	Survey	report
UK	93%	90%	87%
EU	4%	5%	4%
Other	3%	5%	9%

Table 5: Year of study breakdown

	2007	2006	HESA population as given in 2006
Current year	Survey	Survey	report
First	60%	49%	36%
Second	40%	51%	29%
Other	0%	0%	35%

Annex D

Note on Methodology

Type of institution effect

1. On two of the indicators, total workload and scheduled hours of teaching, there is evidence of a small 'type of institution' effect, with Russell Group institutions having slightly higher levels of each. This was not allowed for in the weightings. Russell Group institutions are overrepresented in both surveys which may have slightly inflated the results. The over-representation of Russell Group institutions which was a strong feature of the 2006 survey is much less marked in 2007 (see Table 3 in Annex C) which should have reduced this effect.

JACS principal subjects

2. This is the form of the subject field in the survey data and so is the lowest level of aggregation available. The numbers in many of these categories (of which there are 157) are too small for this to be used as the basis for analysis (see Appendix 1 to this Annex).

17 category grouping

- 3. HESA groups the 157 principal subjects into a 19 category aggregation the standard "JACS groupings". This is the grouping that has been used, with two alterations:
 - The 'combined studies' category is not used all students reporting themselves as studying "combined studies" were asked to identify a principal subject of study
 - Because of the small number of responses in agriculture and related subjects, and also in veterinary sciences, these two have been grouped together⁴⁰.

23 category grouping for weighing

- 4. The analysis uses a slightly less aggregated grouping below the standard 17 subject as a basis for weighting, the idea being that, to some extent, it will deal with the problem of heterogeneity within the (17) subject categories. However, this is not a guarantee that comparisons will not be distorted by different subject profiles (even principal subjects may encompass different courses).
- 5. There are 23 categories, as shown in Appendix 1 to this Annex.

⁴⁰ It is worth remembering, however, that the training of veterinarians has more affinities with medical and dental training than with other sciences and that results for the combined category need to be treated with a certain amount of care.

Appendix 1: Subject(17), Subject(23) and JACS principal subjects

	Subject group	
Subject group (17)	weighting	JACS principal subjects
	Medicine and	
Medicine and dentistry	dentistry	Pre-clinical Medicine
		Pre-clinical Dentistry
		Clinical Medicine
		Clinical Dentistry
		Others in Medicine and Dentistry
		All in medicine and dentistry
Subjects allied to	Subjects allied to	
medicine	medicine	Anatomy, Physiology and Pathology
		Pharmacology, Toxicology and Pharmacy
		Complementary Medicine
		Nutrition
		Ophthalmics
		Aural and Oral Sciences
		Nursing
		Medical Technology
		Others in Subjects allied to Medicine
		All in subjects allied to medicine
	Biological sciences	
Biological sciences	(A)	Biology
		Botany
		Zoology
		Genetics
		Microbiology
		Molecular Biology, Biophysics and Biochemistry
		Others in Biological Sciences

	Biological sciences	
	(B)	Sports Science
		Psychology
		All in biological sciences
	Subject group (23) for	
Subject group (17)	weighting	JACS principal subjects
Veterinary sciences,	Veterinary sciences	Pre-clinical Veterinary Medicine
agriculture and related		Clinical Veterinary Medicine and Dentistry
		Animal Science
		Agriculture
		Others in Veterinary Sciences, Agriculture and related
		subjects
		All in veterinary sciences, agriculture and related
		subjects
	Physical sciences	
Physical sciences	(\	Chemistry
		Materials Science
		Physics
		Forensic and Archaeological Science
		Astronomy
		Geology
		Ocean Sciences
		Others in Physical Sciences
	Physical sciences	Physical and Terrestrial Geographical and Environmental
	(B)	Sciences
		All in physical sciences
	Mathematical	
Mathematical sciences	sciences	Mathematics
		Operational Research
		Statistics
		Others in Mathematical and Computing Sciences

All in mathematical sciences	nce Computer science Computer Science	Information Systems	Software Engineering	Artificial Intelligence	All in computer science
	Computer science				

Subject group (17) Engineering and technology	Subject group (23) for weighting Engineering and technology (A) Engineering and technology (B)	General Engineering Civil Engineering Civil Engineering Mechanical Engineering Mechanical Engineering Naval Architecture Electronic and Electrical Engineering Production and Manufacturing Engineering Chemical, Process and Energy Engineering Others in Engineering Materials Technology not otherwise specified Maritime Technology Others in Technology Architecture
Architecture, building and planning	building and planning	Building Landscape Design Planning (Urban, Rural and Regional) Others in Architecture, Building and Planning

	Subject group (23) for	
Subject group (17)	weighting	JACS principal subjects
Social studies	Social studies (A)	Economics
		Social Work
	Social studies (B)	Politics
		Sociology
		Social Policy
		Anthropology
		Human and Social Geography
		Others in Social studies
		All in social studies
Law	Law	Law by area
		Law by Topic
		Other in Law
		All in law
	Business and	Business studies
Business and	administrative	
administrative studies	studies	Management studies
		Finance
		Accounting
		Marketing
		Human Resource Management
		Tourism, Transport and Travel
		Others in Business and Administrative studies
		All in business and administrative studies

Subject group (23) for

weighting Mass

JACS principal subjects Information Services

communications and documentation

Mass communications

and documentation

Subject group (17)

Publicity studies Media studies Publishing

Journalism

Others in Mass Communications and Documentation

All in mass communications and documentation

	Subject group (23) for	
Subject group (17)	weighting	JACS principal subjects
Languages	Languages (A)	Linguistics
		Comparative Literary studies
		English studies
		Ancient Language studies
		Latin studies
		Classical Greek studies
		Classical studies
		Others in Linguistics, Classics and related subjects
	Languages (B)	French studies
		German studies
		Italian studies
		Spanish studies

Modern Middle Eastern studies American studies Others in Eastern, Asiatic, African, American and Australasian studies

Russian and East European studies Others in European Languages, Literature and related

South Asian studies Other Asian studies

African studies

Chinese studies Japanese studies

subjects

Scandinavian studies

Portuguese studies

All in languages

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Subject group (17)	weighting	JACS principal subjects
Historical and	Historical and	History by period
philosophical studies	philosophical studies	History by area
		History by topic
		Archaeology
		Philosophy
		Theology and Religious studies
	,	Others in Historical and Philosophical studies
		All in historical and philosophical studies
	Creative arts and	
Creative arts and design	design	Fine Art
		Design studies
		Music
		Drama
		Dance
		Cinematics and Photography
		Crafts
		Imaginative Writing
		Others in Creative Arts and Design
		All in creative arts and design
Education	Education (A)	Training Teachers
	Education (B)	Research and Study Skills in Education
		Academic studies in Education
	•	Others in Education
		All in education

Annex E

Detailed analysis of total workload (teaching and private study) by institution and subject

- 1. As last year, a minimum level of response has been enforced at both subject and institution level for the results to be treated as reliable and therefore used in the analyses. This has been necessary because students studying the same subject at the same institution do not generally return the same number of hours, either because of errors in their reporting, or because of variations in provision, with different options or programmes within the same subject.
- 2. In detail, for an institution to be identified in the subject-level analysis, we required at least 15 responses over the two years (compared to 10 in the 2006 report), though in fact the mean number of responses across all subjects and all institutions was over 30.
- 3. For a subject to be reported at all, we required at least 5 institutions to meet those requirements in that subject. One subject veterinary sciences, agriculture and related subjects did not meet the thresholds required for reporting.
- 4. Figures are also given for UCAS tariff points of entrants and for the proportion of first class and upper second class honours. In principle student effort and prior attainment ought to be two of the main determinants of degree class; in practice, there will be a large number of other factors. It is also worth remembering that UCAS tariff points as recorded by HESA do not adequately pick up the prior attainments of mature students and, as a result, are a guide to prior attainment only for courses which recruit exclusively or almost exclusively amongst young students.
- 5. The results for 2006 and 2007 have been averaged. That has the disadvantage that changes that have taken place are dampened; but it has the converse advantage of reducing the possibility of chance year on year fluctuations, and this measure also takes advantage of the larger number of responses available with two years' data, to obtain more robust results.

Medicine			
	Total hours invested	% obtaining 1st or 2.1	Av. UCAS Tariff
University of Keele	43.9	*	458.6
University of Durham	43.3	*	331.6
University of Cambridge	42.1	86.3	563.0
University of Oxford	42.1	88.3	540.1
University of East Anglia	40.7	*	380.0
University of Birmingham	39.6	*	480.7
University of Southampton	38.8	*	475.6
University of Bristol	36.8	*	455.3
Imperial College	36.8	95.0	482.3
University of Leicester	36.5	*	466.3
University of Leeds	34.4	*	473.1
University of Manchester	34.3	*	479.7
University of Liverpool	33.0	*	464.2
University of Newcastle-upon-Tyne	32.5	*	470.7
University College London	32.4	*	490.6
King's College London	31.9	*	455.7
University of Nottingham	31.5	90.4	490.5
University of Sheffield	28.4	*	452.0
Queen Mary, University of London	28.1	*	430.6
* denotes missing data			

	Total hours invested	% obtaining 1st or	Av. UCAS Tariff
Liverpool John Moores University	Total nours invested	2.1 51.8	307.6
University of Plymouth	40.1	65.3	256.6
University of Keele	36.3	58.8	315.1
University of Portsmouth	35.2	50.9	283.9
Coventry University	34.8	67.3	303.9
Bournemouth University	34.7	52.8	249.4
·	34.6	53.9	172.3
Anglia Ruskin University	34.6		
University of Northumbria at Newcastle	34.3	55.9	289.6
Sheffield Hallam University	34.1	64.5	286.8
University of Surrey	34.0	66.3	340.7
University of Sunderland	33.9	55.9	321.4
University of East Anglia	33.8	64.7	364.3
Middlesex University	33.7	54.2	182.4
University of Birmingham	33.7	71.2	380.1
University of Huddersfield	33.6	52.0	262.2
University of Nottingham	33.1	66.8	390.8
University of Southampton	32.7	69.2	380.0
University of Bradford	32.2	56.2	333.3
University of Teesside	32.2	46.5	227.3
University of Liverpool	32.1	63.4	336.9
Oxford Brookes University	32.0	46.0	303.7
University of Wolverhampton	30.9	42.2	229.3
University of Central England in Birmingham	30.1	57.2	285.4
University of Bristol	29.9	82.9	337.3
De Montfort University	29.7	51.3	265.2
University of Hertfordshire	29.5	58.8	264.8
City University	29.3	53.3	335.8
University of the West of England, Bristol	29.3	58.7	282.6
University of Leeds	29.3	64.9	353.9
University of Salford	29.2	54.7	288.0
Brunel University	29.1	77.6	317.9
King's College London	28.3	67.3	377.4
University of Manchester	28.3	59.5	398.8
University of Bath	28.2	77.3	433.3
Canterbury Christ Church University	27.5	42.7	226.0
Kingston University	27.3	43.1	216.7
University College London	26.8	78.9	402.3
University of Newcastle-upon-Tyne		68.9	423.1
Manchester Metropolitan University	26.5	53.7	313.0
Leeds Metropolitan University	26.0	44.7	293.0
University of Sheffield	25.0	68.1	372.9
Aston University	24.3	55.5	393.9
University of Central Lancashire	24.2	51.6	282.5
,	23.7		

Biological Sciences			
	Total hours invested	% obtaining 1st or 2.1	Av. UCAS Tariff
University of Cambridge	41.9	83.1	585.4
University of Oxford	36.8	89.3	501.6
Oxford Brookes University	33.6	52.7	282.9
University of Westminster	31.0	60.2	248.9
Anglia Ruskin University	30.2	60.7	184.2
Imperial College	29.9	78.3	460.7
University of Surrey	29.1	82.1	352.2
University of York	28.7	78.5	458.1
University of Leicester	28.6	66.6	383.8
University of Essex	28.3	66.7	318.4
University of Bath	28.1	85.4	409.3
University of Leeds	27.5	66.6	379.2
University of Kent at Canterbury	27.5	65.5	339.4
University of East Anglia	27.4	65.1	348.8
Middlesex University	26.9	44.4	202.1
University of Durham	26.8	75.1	419.4
University of Bristol	26.7	89.3	433.6
Sheffield Hallam University	26.7	57.5	306.2
University of Newcastle-upon-Tyne	26.5	75.5	387.1
University of East London	26.4	36.4	182.3
Coventry University	26.3	44.1	262.6
University of Warwick	26.2	82.4	424.2
Staffordshire University	26.2	52.3	240.3
University College London	26.1	79.5	429.7
University of Keele	26.1	44.5	309.5
London Metropolitan University	26.1	33.7	228.5
University of Wolverhampton	26.1	41.7	214.5
Kingston University	26.0	38.9	229.0
King's College London	25.7	58.7	356.3
Queen Mary and Westfield College	25.2	57.3	302.3
Royal Holloway, University of London	25.2	71.4	386.0
University of Chester	25.0	39.1	278.9
University of Reading	24.8	82.2	371.4
University of Lancaster	24.8	75.0	370.4
Liverpool John Moores University	24.7	47.4	265.3
University of Birmingham	24.5	69.7	396.7
University of Sussex	24.2	78.0	399.7
University of Teesside	24.2	48.5	228.8
University of Northumbria at Newcastle	24.1	60.3	308.8
University of Nottingham	24.0	81.6	403.2
Nottingham Trent University	24.0	52.4	290.9
University of Manchester	23.7	72.9	416.0
University of Hertfordshire	23.6	55.4	272.7
Aston University	23.6	71.8	346.8
University of Sheffield	23.5	82.1	421.5

University of Lincoln	23.5	36.5	269.9
University of Plymouth	23.4	66.3	296.5
University of Portsmouth	23.3	63.6	284.4
University of Southampton	23.3	72.4	395.4
University of Exeter	23.2	79.8	370.1
Manchester Metropolitan University	22.3	47.6	265.6
University of Liverpool	22.2	82.8	376.2
University of Hull	22.0	65.0	286.4
Loughborough University	21.8	82.2	412.6
University of Salford	21.6	45.5	259.7
University of the West of England, Bristol	21.4	70.7	265.2
Brunel University	21.0	64.6	313.1
University of Central Lancashire	20.1	48.6	282.7
Goldsmiths College	18.7	76.2	325.4
Leeds Metropolitan University	16.5	48.3	288.4
* denotes missing data			

Physical Sciences			
	Total hours invested	% obtaining 1st or 2.1	Av. UCAS Tariff
University of Cambridge	44.8	83.1	585.4
University of Oxford	39.7	81.7	519.1
Royal Holloway, University of London	33.8	57.2	360.6
University of Warwick	32.3	64.3	461.8
University of Surrey	31.4	50.0	314.0
University of Durham	30.2	74.3	452.9
University of Kent at Canterbury	29.8	72.5	293.5
University of Newcastle-upon-Tyne	29.8	61.1	350.1
Imperial College	29.7	72.3	492.9
University of Leicester	29.6	60.8	358.0
Coventry University	29.2	*	231.8
University of Hull	28.7	53.3	280.3
University of Liverpool	28.4	75.2	337.5
University College London	28.0	73.6	411.8
University of Bath	28.0	58.1	420.9
University of Keele	27.8	49.3	283.2
Kingston University	27.8	53.1	202.4
University of Nottingham	27.3	75.1	415.5
Nottingham Trent University	27.3	50.0	233.4
University of Bristol	27.1	78.9	425.8
University of Sheffield	27.0	65.6	382.5
University of Southampton	26.7	70.1	400.2
University of Sussex	26.5	68.6	384.3
Loughborough University	26.3	61.1	341.3
University of York	25.9	61.5	413.2
University of Manchester	25.6	60.2	411.9
University of Leeds	25.5	65.4	361.7
University of East Anglia	25.4	71.7	333.3
University of Reading	25.3	72.8	360.0
University of Lancaster	25.2	52.9	357.0
University of Teesside	24.9	47.0	242.5
University of Birmingham	24.6	61.0	372.1
Staffordshire University	24.6	58.2	256.4
University of Exeter	23.7	59.2	359.1
University of Plymouth	23.5	60.9	270.7
University of Northumbria at Newcastle	23.5	48.9	270.7
University of Central Lancashire	21.8	61.1	280.5
Manchester Metropolitan University	19.8	42.1	243.7
University of Portsmouth	18.8	56.1	256.9
* denotes missing data			

Mathematics			
	Total hours invested	% obtaining 1st or 2.1	Av. UCAS Tariff
University of Cambridge	36.6	73.9	586.4
University of Oxford	34.4	*	531
University of Warwick	32.8	68.3	528.2
University of Durham	30.6	77	491.3
Imperial College	30.4	57.8	498.1
University of Southampton	29.9	64.4	425.1
King's College London	29.0	52.3	404.9
University of Birmingham	28.4	64.4	426.5
University of Exeter	28.1	59.5	394.3
Queen Mary, University of London	27.8	34	297.2
University of Bath	27.6	67.3	503.4
Loughborough University	25.7	52.4	353.8
University of Keele	25.6	*	334.7
University of Leeds	25.3	57.7	400.8
University of York	25.2	65.3	472.3
University of Newcastle-upon-Tyne	24.6	58.2	407.8
University College London	24.6	56.1	489.8
LSE	24.2	64.8	495
University of Sheffield	24.0	62.5	400.8
University of Manchester	22.8	51.4	419.7
University of Bristol	22.4	71.2	490.7
University of Sussex	21.9	*	368.1
University of East Anglia	21.9	69.3	402.9
University of Nottingham	21.9	69.8	468.8
University of Lancaster	20.9	53.9	385.9
University of Reading	20.2	60	342.6
* denotes missing data			

Computer Science			
	Total hours invested	% obtaining 1st or 2.1	Av. UCAS Tariff
University of Cambridge	34.9	68.5	569.3
City University	34.7	66.7	265.5
University of York	34.0	75.9	458.4
Imperial College	32.7	81.7	441.7
University of Durham	31.4	*	374.2
University of Reading	30.8	67.4	328.6
Kingston University	30.3	42.5	189.2
University of Sunderland	30.2	43.3	215.6
University of Nottingham	30.0	57.5	379.1
University of Manchester	29.7	60.3	357.8
De Montfort University	29.1	43.8	174.6
University of Bath	28.7	58.5	417.7
Bournemouth University	27.0	50	229
Staffordshire University	26.9	47.1	239.7
University of Southampton	26.5	70.3	417.3
Coventry University	26.2	51	198.3
Aston University	25.8	46.3	294.5
University of Hull	25.7	40.7	246.5
University of Hertfordshire	25.6	47.9	195.5
University of Kent at Canterbury	25.4	61.2	285
University of Westminster	25.3	38.1	157.9
University of Plymouth	25.3	63.5	238
University of Lancaster	25.1	49.7	341.8
University of Newcastle-upon-Tyne	25.0	61.4	336.8
University of Warwick	24.7	66	473
University of Birmingham	24.7	67.5	404
University of Leeds	24.5	51.9	346.3
Manchester Metropolitan University	22.9	36.9	231.4
University of Bristol	22.1	81.1	421.1
University of East Anglia	21.4	58.4	297.2
King's College London	21.0	60.2	352.9
Loughborough University	19.9	68.4	317.8
University of Portsmouth	18.7	51.6	234.4
University of Teesside	18.6	44.6	229.6
Leeds Metropolitan University	18.3	47.3	205.4
Sheffield Hallam University	17.8	50.9	218.9
University of Northumbria at Newcastle	17.4	43.1	248.3
* denotes missing data			

		% obtaining 1st or	Av. UCAS Tariff
	Total hours invested	2.1	
University of Cambridge	41.1	94.8	576.5
University of Oxford	36.0	72.6	542.7
University of Surrey	35.8	64.5	344.4
City University	34.2	38.5	221.6
Imperial College	33.9	74.7	474.5
University of Bristol	33.5	73.5	467.2
University of Liverpool	32.5	61.0	321.7
Oxford Brookes University	32.1	58.7	242.9
University of Durham	32.1	71.8	451.2
University of Plymouth	32.1	51.9	256.2
University College London	31.8	47.0	397.1
Kingston University	31.5	64.9	186.1
Brunel University	30.9	52.8	328.5
Queen Mary, University of London	30.8	48.6	285.7
University of Southampton	30.3	77.3	427.1
Staffordshire University	29.8	52.6	265.1
Loughborough University	29.8	63.8	383.3
University of Lancaster	29.7	49.6	336.2
University of Leicester	29.5	*	347.4
University of Newcastle-upon-Tyne	29.5	62.3	378.9
University of Huddersfield	29.4	46.8	256.5
University of Nottingham	28.9	63.7	387.9
University of Birmingham	28.7	54.9	378.7
Coventry University	28.0	72.3	253.8
University of Bath		65.1	435.9
University of Manchester	27.8 27.6	59.2	390.3
Manchester Metropolitan University		57.3	263.3
University of Central England in Birmingham	26.4	58.5	219.2
Aston University	26.4	46.8	296.2
University of Sheffield	26.0	67.7	408.7
University of Salford	25.8	48.7	243.8
University of the West of England, Bristol	25.6	53.4	244.8
University of Hertfordshire	25.5	55.9	230.3
University of Portsmouth	25.4	56.9	244.7
University of Leeds	25.1	63.2	363.3
University of Warwick	24.4	69.4	401.1
Sheffield Hallam University	22.8	66.0	202.6
Southampton Solent University	21.6	47.8	225.9
Saturday Solution States	21.3	17.0	
* denotes missing data			

	Total hours invested	% obtaining 1st or 2.1	Av. UCAS Tariff
University of Bath	47.3	*	496.1
University of Liverpool	39.5	60.3	304.1
University of Nottingham	36.0	48.7	440.8
University of Brighton	35.1	46.4	304.1
University of Lincoln	33.5	48.3	258.8
Kingston University	33.1	54.0	247.3
University of Manchester	32.5	64.9	358.4
Leeds Metropolitan University	29.1	65.1	256.4
Nottingham Trent University	27.9	55.1	264.6
University of Newcastle-upon-Tyne	27.1	58.4	393.7
University of Sheffield	27.0	61.5	407.8
Oxford Brookes University	26.3	59.7	311.8
University of the West of England, Bristol	21.8	44.5	255.0
* denotes missing data			

Social Studies				
	Total hours invested	% obtaining 1st or 2.1	Av. UCAS Tariff	
University of Cambridge	34.7	85.6	539.0	
University of Oxford	33.6	93.3	507.2	
University College London	26.7	69.7	471.4	
Coventry University	26.5	55.7	236.3	
University of Derby	26.3	44.8	195.6	
London Metropolitan University	26.2	43.3	214.6	
University of Plymouth	25.6	56.5	253.3	
Roehampton University	25.4	47.7	211.2	
University of Westminster	25.3	61.4	217.8	
University of Huddersfield	25.1	38.5	233.6	
University of Durham	24.8	82.9	406.8	
University of Chichester	24.6	47.6	230.7	
King's College London	24.3	72.7	383.8	
Middlesex University	24.2	41.8	176.1	
University of Keele	24.2	46.0	312.8	
De Montfort University	24.2	58.5	209.4	
London South Bank University	24.2	51.0	188.7	
LSE	24.2	74.3	472.3	
Anglia Ruskin University	24.1	59.6	167.9	
University of Bradford	23.8	58.2	243.7	
University of Wolverhampton	23.8	47.3	192.1	
University of Kent at Canterbury	23.6	58.7	291.7	
Southampton Solent University	23.5	49.4	222.5	
University of York	23.1	70.1	429.6	
University of Southampton	23.0	64.1	379.4	
University of Manchester	22.8	74.8	410.0	
University of Warwick	22.8	81.2	463.9	
School of Oriental & African Studies	22.8	68.6	371.1	
University of Exeter	22.7	72.5	403.4	
University of Bath	22.6	74.8	404.5	
University of Birmingham	22.5	76.2	382.1	
University of Central Lancashire	22.5	46.9	228.9	
Queen Mary, University of London	22.3	63.7	338.1	
University of Surrey	22.3	53.2	316.6	
University of Teesside	22.2	47.9	221.2	
University of Gloucestershire	22.1	68.7	220.6	
City University	22.0	53.9	293.7	
Staffordshire University	22.0	56.7	217.9	
University of Bristol	22.0	84.6	429.8	
Brunel University	22.0	61.0	302.7	
University of Northumbria at Newcastle	21.9	53.2	268.0	
University of Sussex	21.8	81.9	376.1	
Loughborough University	21.4	52.6	349.8	
Manchester Metropolitan University	21.3	43.8	242.9	
University of Nottingham	21.2	82.3	429.5	

University of Hull		54.0	282.3
Nottingham Trent University	21.1	49.1	262.3
University of Lancaster	20.9	57.1	355.3
University of Leeds	20.8	80.9	385.0
University of Greenwich	20.7	33.8	178.5
·	20.7		264.3
Goldsmiths College	20.6	54.5	
University of Lincoln	20.4	46.5	232.7
Royal Holloway, University of London	20.3	50.4	362.4
University of Winchester	20.3	*	259.0
University of Portsmouth	20.3	45.5	279.3
University of Leicester	20.3	62.2	332.6
Liverpool John Moores University	20.2	38.3	240.0
Bath Spa University	20,2	63.4	232.4
Canterbury Christ Church University	20.1	46.9	226.4
University of Essex	20.0	58.0	335.6
University of Sheffield	19.9	70.9	382.3
Sheffield Hallam University	19.8	49.9	263.9
University of Reading	19.7	66.7	338.1
Oxford Brookes University	19.6	50.4	289.7
University of Hertfordshire	19.5	45.5	225.1
University of Newcastle-upon-Tyne	19.5	64.8	373.6
Kingston University	19.2	39.4	211.1
University of Chester	19.2	35.6	264.3
University of Liverpool	19.0	67.1	334.4
Leeds Metropolitan University	18.4	50.0	228.3
University of East Anglia		60.3	334.2
University of the West of England, Bristol	18.3	53.4	245.1
Aston University	18.2	*	332.6
University of Salford	18.1	44.6	250.5
University of Brighton	17.7	46.4	278.1
	14.9		2,0.1
* denotes missing data			

Law			
	Total hours invested	% obtaining 1st or 2.1	Av. UCAS Tariff
University of Cambridge	41.4	85.9	529.8
University of Oxford	40.1	90.6	507.0
University of Southampton	37.1	71.6	431.5
University of Birmingham	30.6	68.2	457.4
University of Bristol	30.4	70.2	447.0
Queen Mary, University of London	30.3	70.1	392.5
Middlesex University	30.3	36.6	204.2
University of Essex	29.9	66.1	361.0
University of Newcastle-upon-Tyne	29.8	79.4	435.3
University of Durham	29.2	71.3	450.4
University of Nottingham		59.3	452.3
London Metropolitan University	28.9	26.6	226.3
University of Kent at Canterbury		51.8	356.7
LSE	28.1	87.9	487.0
University of East Anglia	27.9	65.2	410.6
University of Leicester	27.8 27.5	64.3	418.7
University of Warwick	27.2	82.3	461.6
University of Sheffield		63.3	431.6
University of Lincoln	27.1	39.9	257.9
University of Exeter	27.1	67.4	443.2
University of Manchester	27.1	81.8	475.5
University of Hull	26.5	48.6	366.7
University of Lancaster	26.4	65.3	414.5
King's College London	25.8 25.7	84.7	468.7
Nottingham Trent University	25.4	43.2	317.8
University of Plymouth	25.4	44.7	273.6
Coventry University		24.8	261.8
University College London	25.1 25.1	84.2	489.5
University of the West of England, Bristol		40.9	301.4
University of Leeds	25.0 24.9	74.7	452.6
University of Keele		36.2	357.6
Manchester Metropolitan University	24.5	43.9	328.0
University of Reading	24.2	60.6	392.1
University of Northumbria at Newcastle	24.1	55.1	381.9
University of Central Lancashire		29.7	274.9
University of Surrey	23.7	43.6	361.6
University of Hertfordshire	23.6	32.3	258.7
Kingston University	23.3	36.1	270.8
University of Liverpool	23.3	80.2	421.5
University of Westminster	22.9	48.4	294.8
De Montfort University	22.6	38.5	240.5
Leeds Metropolitan University	21.9	58.0	290.3
Oxford Brookes University	21.8	36.0	357.8
Sheffield Hallam University	21.3	60.6	282.6
Brunel University	21.2	60.6	356.1
•	20.9		

City University	20.9	78.2	365.8
University of Sussex	20.4	72.8	380.6
* denotes missing data			

	Total haves invested	% obtaining 1st or	Av. UCAS Tariff
Hairrania, of Druham	Total hours invested	2.1	
University of Durham	27.3	66.1 54.7	322.3
University of York	26.6		397.2
LSE	26.3	69.2	469.2
University of Wolverhampton	25.4	29.1	176.2
University of Warwick	25.1	83.1	460.8
Coventry University	25.0	51.7	217.1
University of Hull	24.5	50.4	242.4
London Metropolitan University	24.5	39.4	208.5
University of Manchester	24.2	72.2	403.3
University of Essex	24.2	41.3	307.4
Buckinghamshire Chilterns University College	23.8	34.0	193.7
University of Huddersfield	23.7	44.9	229.4
Loughborough University	23.7	75.2	405.2
University of Bath	23.5	98.0	418.6
University of Bradford	23.5	52.3	243.7
University of Exeter	23.3	58.0	406.8
City University	23.2	75.7	372.1
University of Southampton	23.2	74.2	416.5
University of Birmingham	23.2	69.0	397.1
University of Leeds	22.7	68.0	409.3
University of Central England in Birmingham	22.6	45.4	224.5
University of Surrey	22.6	63.0	340.9
Staffordshire University	22.5	44.0	210.9
Kingston University	22.3	30.4	215.1
University of Central Lancashire	22.2	43.5	242.4
Aston University	21.8	68.9	394.2
University of Lancaster		71.9	403.6
University of Keele	21.8	41.9	297.6
Bournemouth University	21.8	50.5	273.3
Anglia Ruskin University	21.2	35.5	150.9
Oxford Brookes University	21.0	52.1	305.5
University of Nottingham	20.9	76.5	412.8
Middlesex University	20.9	40.3	160.2
University of Portsmouth	20.9	45.5	279.8
University of Derby	20.8	34.0	211.3
University of Kent at Canterbury	20.8	42.0	296.1
Manchester Metropolitan University	20.6	44.7	260.4
University of Westminster	20.5	47.2	234.6
University of Newcastle-upon-Tyne	20.2	78.5	399.8
University of Hertfordshire	20.0	26.8	235.9
University of Sheffield	20.0	67.0	373.7
	19.9		
University of Lincoln	19.8	40.9	240.2
Brunel University	19.8	64.3	295.5
University of Liverpool	19.7	70.2	366.1
University of Plymouth	19.7	46.3	255.5

Nottingham Trent University	19.7	52.9	271.8
University of Brighton	19.6	57.9	272.2
Southampton Solent University	19.5	37.9	202.5
University of Salford	19.2	31.3	260.2
De Montfort University	19.1	37.8	235.8
Leeds Metropolitan University	18.9	41.0	251.4
Sheffield Hallam University	18.9	54.0	254.2
University of Gloucestershire	18.9	41.6	237.0
University of Northumbria at Newcastle	18.4	49.2	297.2
University of the West of England, Bristol	17.6	50.3	257.4
Liverpool John Moores University	17.5	36.6	245.0
University of East Anglia	17.5	55.7	348.5
University of Greenwich	16.5	31.1	187.0
Royal Holloway, University of London	15.6	57.6	352.3
* denotes missing data			

27.0 24.7 24.5 23.9 22.5 19.7	66.5 60.3 51.7 85.4 67.8 62.0	320.6 351.6
24.5 23.9 22.5	51.7 85.4 67.8	246.4 320.6 351.6
23.9 22.5	85.4 67.8	351.6
22.5	67.8	
		351.6 312.1
19.7	62.0	312.1
19.6	65.4	259.6
18.6	54.8	259.6
17.4	60.3	257.2
16.9	74.3	393.0
15.1	67.7	272.6
14.8	82.5	278.8
	18.6 17.4 16.9 15.1	19.6 18.6 17.4 16.9 15.1 54.8 60.3 74.3 67.7 82.5

	Total hours invested	% obtaining 1st or 2.1	Av. UCAS Tariff
Jniversity of Cambridge	36.1	92.7	512.4
Jniversity of Oxford	32.9	94.5	494.9
Jniversity of Durham	28.3	88.8	443.2
Jniversity of Keele	27.2	57.5	313.9
Jniversity College London	26.5	89.7	436.2
Jniversity of Warwick	26.1	93.5	461.0
Canterbury Christ Church University	25.1	48.1	262.6
Jniversity of Liverpool	24.6	76.9	367.3
King's College London	24.2	80.8	436.7
Jniversity of Leicester	23.7	68.8	341.7
Jniversity of Birmingham	23.4	73.6	397.5
Queen Mary, University of London	23.2	81.0	360.4
Jniversity of Lancaster	23.1	66.5	364.2
Royal Holloway, University of London	23.1	83.5	400.8
University of Southampton	22.6	82.7	388.8
Jniversity of Bristol	22.5	90.1	425.6
Jniversity of Essex	22.4	65.2	319.6
Jniversity of Exeter	22.2	84.3	418.5
Jniversity of Leeds	22.2	79.8	400.6
SE	22.1	78.4	463.8
Jniversity of Sheffield	21.7	86.8	414.1
Jniversity of York	21.3	88.9	454.8
University of Manchester	21.1	78.4	397.4
Jniversity of Wolverhampton	20.9	*	231.1
Jniversity of Nottingham	20.8	86.6	408.1
Manchester Metropolitan University	20.6	47.9	271.6
Jniversity of Sussex	20.4	87.8	394.9
Jniversity of Plymouth	20.1	*	263.0
University of Kent at Canterbury	19.7	73.3	321.4
Jniversity of Hull	19.1	62.3	292.0
Jniversity of Greenwich	19.1	57.3	206.3
Oxford Brookes University	19.0	54.4	321.3
Jniversity of Hertfordshire	18.8	57.5	261.9
Jniversity of Reading	18.7	73.1	348.2
Jniversity of Salford	18.7	*	265.8
University of Newcastle-upon-Tyne	18.3	76.7	389.7
Jniversity of Winchester	18.0	51.8	254.3
Jniversity of East Anglia	17.1	79.8	363.8
University of the West of England, Bristol	15.7	52.2	267.1

	Total hours invested	% obtaining 1st or	Av. UCAS Tariff
University of Northumbria at Newcastle		2.1 65.4	291.7
Loughborough University	31.9	70.7	287.1
University College Falmouth	30.9	80.7	*
University of Oxford	30.5	88.6	455.8
Coventry University	30.1	68.6	285.4
University of Cambridge	30.1	90.5	487.8
London Metropolitan University	30.0	57.9	255.3
University of East London	29.0 28.6	53.9	211.2
London South Bank University	28.4	*	215.9
Nottingham Trent University		62.3	305.3
University of Central England in Birmingham	27.8	61.1	298.1
The Surrey Institute of Art and Design	27.7	*	*
University of Sunderland	27.6	61.0	247.8
Anglia Ruskin University	27.4	54.9	195.7
University of Southampton	27.3	79.1	386.5
Middlesex University	27.3	58.6	257.0
Bath Spa University	27.3 27.1	75.4	264.4
Manchester Metropolitan University		62.3	287.1
Kingston University	27.0 26.9	57.6	264.8
University of Newcastle-upon-Tyne	26.9	68.9	366.9
Goldsmiths College	26.9	67.0	343.7
University of Lincoln	26.7	52.0	259.1
University of Leeds	26.5	73.8	380.5
De Montfort University	26.5	54.0	259.2
Bournemouth University	26.5	64.2	258.9
University of Westminster	26.5	60.4	292.0
University of Plymouth	25.9	63.7	258.3
Staffordshire University	25.9	56.0	238.2
University of Teesside	25.6	55.7	223.1
University of Bristol	25.3	94.9	405.7
University of Central Lancashire	24.9	61.8	234.8
Leeds Metropolitan University	24.8	57.9	246.9
University of the West of England, Bristol	24.8	66.2	260.9
Sheffield Hallam University	24.7	51.1	274.8
Brunel University	24.4	76.6	321.5
University of Reading	24.2	77.2	343.0
University of Wolverhampton	24.2	47.7	219.5
University of Surrey	24.0	68.9	351.2
Liverpool John Moores University	23.9	64.7	271.5
Royal Holloway, University of London	23.7	84.2	407.2
Southampton Solent University	23.4	56.4	250.2
University of Gloucestershire	23.1	62.2	270.9
University of East Anglia	22.6	85.3	359.2
University of Winchester	22.6	56.5	261.9
Canterbury Christ Church University	22.4	51.2	260.4

University of Chichester	22.4	49.3	253.5
University of Exeter	22.3	91.3	397.0
University of Huddersfield	22.1	58.0	256.7
University of Portsmouth	22.0	56.7	284.2
University of Kent at Canterbury	21.2	72.4	342.9
Roehampton University	21.0	63.4	266.5
University of Chester	20.8	32.7	288.3
Liverpool Hope University	20.8	43.1	230.3
University of Lancaster	20.7	78.3	380.8
University of Manchester	20.6	91.5	287.1
University of Salford	20.0	58.0	261.1
York St John University College	19.0	57.8	267.2
University of Nottingham	18.9	90.4	422.8
University of York	18.5	87.7	436.4
University of Hull	17.8	67.8	293.5
* denotes missing data			

Education			
	Total hours invested	% obtaining 1st or 2.1	Av. UCAS Tariff
University of Central England in Birmingham	34.6	51.6	266.7
University of Cambridge	33.4	86.4	451.5
University of Hull	31.9	42.3	238.1
University of Durham	31.9	56.3	344.0
Edge Hill University	30.2	48.9	275.8
University of Sunderland	29.9	50.0	260.4
University of Worcester	29.8	62.6	280.7
Roehampton University	28.5	45.5	243.2
University of Hertfordshire	28.2	66.1	244.9
University of Northampton	28.2	55.6	229.8
Bishop Grosseteste University College	28.0	40.3	379.0
Oxford Brookes University	28.0	53.3	269.0
Anglia Ruskin University	27.1	48.6	176.0
University of Winchester	26.9	53.7	269.4
Canterbury Christ Church University	26.9	55.8	305.2
Middlesex University	26.6	60.2	206.8
Sheffield Hallam University	26.6	57.9	255.3
University of Chichester	26.1	42.3	250.3
University of Wolverhampton	26.0	58.4	235.5
University of Brighton	26.0	45.5	292.2
Liverpool Hope University	25.9	46.7	232.0
Nottingham Trent University	25.7	58.7	284.5
York St John University College	25.6	64.6	347.3
University of Lancaster	25.6	*	*
Manchester Metropolitan University	25.4	51.2	260.2
Liverpool John Moores University	24.4	43.8	247.9
University of Plymouth	24.4	69.0	259.6
Leeds Metropolitan University	24.2	52.4	262.9
University of Greenwich	23.1	42.2	197.7
University of Gloucestershire	23.0	60.1	254.0
University of Derby	22.3	54.9	217.5
Newman College	21.7	61.3	213.3
Bath Spa University	20.7	67.0	208.5
University of the West of England, Bristol	19.6	81.0	261.1
University of Exeter	15.9	*	318.1
* denotes missing data			
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Annex F

Significance tests for subject differences

Annex F is available separately as an Excel spreadsheet:

http://www.hepi.ac.uk/downloads/33AnnexF.xls