Student satisfaction and library provision:

An analysis of National Student Survey and Times Higher Education Student Experience Survey data

A CIBER working paper for Research Libraries UK

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Key findings

- There is considerable variation in library satisfaction across the sector, but RLUK member institutions score very significantly higher than the rest of the sector: a 6.5 percentage point premium in the National Student Survey..

- Library satisfaction ratings for RLUK institutions are high and consistent and they outperform the rest of the HE sector by some distance. If we report on the basis of the *average ratings* given to the 22 questions that make up the National Student Survey (NSS) rather than the percentage that mostly or definitely agree (the usual way that the data are reported), we find library provision (Q16) ranking third in both 2007 and 2009. If we focus just on those students that say they `definitely agree' with the NSS statements, then library provision is ranked second, only behind IT provision in 2007 and 2009. Library services and provision are clearly very much appreciated by students as part of their university experience.

- Library satisfaction is positively correlated with institutional size, so this aspect must be (and is in this report) controlled for in any analysis. Why larger institutions generally achieve higher levels of library satisfaction is beyond the scope of this project, but it is an interesting finding nonetheless.

- Library satisfaction and overall course satisfaction are positively correlated: students that rate their libraries highly, also tend to rate their overall course experience highly (or vice versa). The library effect is statistically very significant but small, explaining 2.6 per cent of the variance in overall course satisfaction.

- Two particular aspects of library provision are strong predictors of overall course satisfaction: staff training hours per student FTE and annual loans per FTE user. Libraries should consider the implications of this finding: investing in user training may be one simple strategy to enhance NSS ratings and build a closer and more personal relationship between students and the library.

- Library satisfaction, as measured in the National Student Survey, correlates positively and significantly with a wide range of Sconul measures. The five largest effects are given below:

⇒ *Professional staff as a percentage of total library staff (explains 16.2 per cent of variance in library satisfaction scores)*

⇒ *Gross library spend per FTE user (15.5 per cent)*

⇒ *Net library spend per FTE user*

⇒ *Spend on information provision per FTE user*

⇒ *Library floor space per FTE student*

- The overwhelming weight of evidence in this study is that library provision matters in terms the student experience and that protecting library staffing, especially at professional level, and dedicating more resource to user training are two areas that need to feature strongly in any negotiations with institutional managers.

About this working paper

Most of the analysis in this paper relates to the most current (2009) data from the NSS. In the first six tables and the first graphic, we compare with 2007. Ideally, a wider range of years would have been collected and processed : unfortunately, the format of the public data is alarmingly inconsistent between one release and the next. Compiling a full set of NSS data in a common format for detailed statistical analysis would have been beyond the resources available for this project.

Student satisfaction with library provision in context

Table 1: Average scores for NSS questions: RLUK members

Source: National Student Survey 2007

				95% CI		
Q	**Question text**	**Mean**	**S.D.**	**Lower**	**Upper**	**Rank**
17	I have been able to access general IT resources when needed	4.35	0.16	4.28	4.43	1
4	The course is intellectually stimulating	4.25	0.12	4.19	4.30	2
16	***The library resources and services are good enough***	***4.15***	***0.23***	***4.05***	***4.26***	***3***
3	Staff are enthusiastic about what they are teaching	4.13	0.10	4.09	4.18	4
11	I have been able to contact staff when I needed to	4.11	0.11	4.07	4.16	5
22	Overall, I am satisfied with the quality of the course	4.10	0.12	4.05	4.16	6
20	My communication skills have improved	4.07	0.12	4.02	4.13	7
18	I have been able to access specialised equipment, etc.	4.06	0.14	4.00	4.13	8
1	Staff are good at explaining things	4.04	0.07	4.01	4.07	9
13	The timetable works efficiently	4.00	0.09	3.96	4.04	10
21	I feel confident in tackling unfamiliar problems	3.99	0.11	3.95	4.04	11
19	The course has helped me present myself with confidence	3.93	0.10	3.88	3.98	12
2	Staff have made the subject interesting	3.89	0.11	3.84	3.94	13
15	The course is well organised and is running smoothly	3.88	0.12	3.83	3.94	14
14	Any changes in the course have been communicated	3.88	0.13	3.82	3.94	15
6	Assessment arrangements and marking have been fair	3.79	0.10	3.75	3.84	16
10	I have received sufficient advice and support with my studies	3.70	0.13	3.64	3.76	17
12	Good advice was available regarding study choices	3.68	0.13	3.63	3.74	18
5	The criteria used in marking have been clear in advance	3.61	0.11	3.56	3.66	19

7	Feedback on my work has been prompt	3.27	0.22	3.17	3.37	20
9	Feedback on my work has helped me clarify things	3.24	0.19	3.15	3.33	21
8	I have received detailed comments on my work	3.23	0.22	3.14	3.33	22
	All questions	**3.88**	**0.34**	**3.85**	**3.91**	

Note: 1=Definitely disagree, 5=Definitely agree

Table 2: % students who mostly or definitely agree with NSS statements: RLUK members

Source: National Student Survey 2007

				95% CI		
Q	**Question text**	**Mean**	**S.D.**	**Lower**	**Upper**	**Rank**
17	I have been able to access general IT resources	90.10	4.11	88.22	91.97	1
1	Staff are good at explaining things	88.62	2.18	87.63	89.61	2
4	The course is intellectually stimulating	87.14	2.65	85.94	88.35	3
22	Overall, I am satisfied with the quality of the course	84.81	2.91	83.49	86.13	4
3	Staff are enthusiastic about what they are teaching	84.10	3.08	82.69	85.50	5
16	***The library resources and services are good enough***	***83.81***	***6.56***	***80.82***	***86.80***	***6***
11	I have been able to contact staff when I needed to	83.10	3.16	81.66	84.53	7
13	The timetable works efficiently	79.62	3.47	78.04	81.20	8
18	I have been able to access specialised equipment, etc.	78.33	4.64	76.22	80.45	9
2	Staff have made the subject interesting	78.14	4.64	76.03	80.25	10
20	My communication skills have improved	78.00	4.37	76.01	79.99	11
21	I feel confident in tackling unfamiliar problems	75.52	4.45	73.50	77.55	12
15	The course is well organised and is running smoothly	75.19	4.35	73.21	77.17	13
14	Changes in the course have been communicated effectively	74.14	4.27	72.20	76.09	14
19	The course has helped me present myself with confidence	73.95	4.24	72.02	75.88	15
6	Assessment arrangements and marking have been fair	71.76	3.56	70.14	73.38	16
10	I have received sufficient advice and support with my studies	67.76	5.19	65.40	70.12	17
12	Good advice was available for study choices	63.86	4.70	61.72	66.00	18
5	The criteria used in marking have been clear in advance	63.19	4.63	61.08	65.30	19
7	Feedback on my work has been prompt	50.67	7.94	47.05	54.28	20
8	I have received detailed comments on my work	49.86	7.49	46.45	53.27	21
9	Feedback on my work has helped me clarify things	47.81	7.39	44.44	51.17	22
	All questions	**74.07**	**12.96**	**72.88**	**75.25**	

Table 3: % students who definitely agree with NSS statements: RLUK members

Source: National Student Survey 2007

				95% CI		
Q	**Question text**	**Mean**	**S.D.**	**Lower**	**Upper**	**Rank**
17	I have been able to access general IT resources	50.14	9.06	46.02	54.27	1
16	***The library resources and services are good enough***	***44.00***	***11.37***	***38.82***	***49.18***	***2***
4	The course is intellectually stimulating	43.24	8.55	39.35	47.13	3
20	My communication skills have improved	37.33	5.40	34.88	39.79	4
11	I have been able to contact staff when I needed to	37.24	6.31	34.37	40.11	5
18	I have been able to access specialised equipment, etc.	34.38	8.57	30.48	38.28	6
22	Overall, I am satisfied with the quality of the course	34.38	6.41	31.46	37.30	6
3	Staff are enthusiastic about what they are teaching	33.90	6.07	31.14	36.67	8
13	The timetable works efficiently	33.33	3.83	31.59	35.07	9
21	I feel confident in tackling unfamiliar problems	31.24	5.15	28.90	33.58	10
14	Changes in the course have been communicated effectively	29.19	5.43	26.72	31.66	11
19	The course has helped me present myself with confidence	28.90	4.87	26.69	31.12	12
15	The course is well organised and is running smoothly	26.62	4.74	24.46	28.78	13
12	Good advice was available for study choices	22.95	5.00	20.67	25.23	14
5	The criteria used in marking have been clear in advance	21.76	3.28	20.27	23.26	15
6	Assessment arrangements and marking have been fair	21.67	3.89	19.90	23.44	16
10	I have received sufficient advice and support with my studies	21.19	5.19	18.83	23.55	17
1	Staff are good at explaining things	20.57	4.79	18.39	22.75	18
2	Staff have made the subject interesting	19.43	5.94	16.73	22.13	19
8	I have received detailed comments on my work	13.52	4.32	11.56	15.49	20
9	Feedback on my work has helped me clarify things	13.00	4.80	10.82	15.18	21
7	Feedback on my work has been prompt	12.43	4.28	10.48	14.38	22
	All questions	**28.66**	**11.76**	**27.58**	**29.73**	

Table 4: Average scores for NSS questions: RLUK members

Source: National Student Survey 2007

				95% CI		
Q	**Question text**	**Mean**	**S.D.**	**Lower**	**Upper**	**Rank**
17	I have been able to access general IT resources	4.32	0.15	4.26	4.39	1
4	The course is intellectually stimulating	4.31	0.11	4.26	4.36	2
16	***The library resources and services are good enough***	***4.21***	***0.20***	***4.12***	***4.31***	***3***
11	I have been able to contact staff when I needed to	4.18	0.11	4.13	4.24	4
3	Staff are enthusiastic about what they are teaching	4.18	0.12	4.13	4.24	5
22	Overall, I am satisfied with the quality of the course	4.14	0.14	4.08	4.21	6
20	My communication skills have improved	4.13	0.12	4.07	4.19	7
18	I have been able to access specialised equipment, etc.	4.10	0.14	4.04	4.16	8
1	Staff are good at explaining things	4.07	0.09	4.03	4.12	9
13	The timetable works efficiently	4.06	0.10	4.02	4.10	10
21	I feel confident in tackling unfamiliar problems	4.04	0.09	4.00	4.08	11
19	The course has helped me present myself with confidence	3.97	0.11	3.92	4.02	12
2	Staff have made the subject interesting	3.96	0.11	3.92	4.01	13
15	The course is well organised and is running smoothly	3.96	0.15	3.89	4.02	14
14	Changes in the course have been communicated effectively	3.95	0.16	3.88	4.02	15
6	Assessment arrangements and marking have been fair	3.84	0.08	3.80	3.88	16
10	I have received sufficient advice and support with my studies	3.77	0.17	3.69	3.85	17
12	Good advice was available for study choices	3.75	0.14	3.69	3.82	18
5	The criteria used in marking have been clear in advance	3.64	0.15	3.57	3.70	19
7	Feedback on my work has been prompt	3.37	0.25	3.26	3.48	20
9	Feedback on my work has helped me clarify things	3.34	0.22	3.24	3.44	21
8	I have received detailed comments on my work	3.33	0.24	3.22	3.44	22
	All questions	**3.94**	**0.33**	**3.91**	**3.97**	

Note: 1=Definitely disagree, 5=Definitely agree

Table 5: % of students who mostly or definitely agree with NSS statements: RLUK members

Source: National Student Survey 2009

				95% CI		
Q	**Question text**	**Mean**	**S.D.**	**Lower**	**Upper**	**Rank**
1	Staff are good at explaining things	89.10	3.06	87.70	90.49	1
17	I have been able to access general IT resources	89.05	4.07	87.20	90.90	2
4	The course is intellectually stimulating	88.48	2.48	87.35	89.61	3
22	Overall, I am satisfied with the quality of the course	85.62	3.84	83.87	87.37	4
3	Staff are enthusiastic about what they are teaching	85.57	4.06	83.72	87.42	5
11	I have been able to contact staff when I needed to	85.14	3.38	83.60	86.68	6
16	***The library resources and services are good enough***	***85.14***	***6.04***	***82.40***	***87.89***	***6***
13	The timetable works efficiently	81.38	3.34	79.86	82.90	8
2	Staff have made the subject interesting	81.00	4.60	78.90	83.10	9
20	My communication skills have improved	79.57	4.43	77.55	81.59	10
18	I have been able to access specialised equipment, etc.	79.43	4.88	77.21	81.65	11
21	I feel confident in tackling unfamiliar problems	77.81	3.46	76.24	79.38	12
15	The course is well organised and is running smoothly	77.57	5.46	75.08	80.06	13
14	Changes in the course have been communicated effectively	76.62	5.43	74.15	79.09	14
19	The course has helped me present myself with confidence	75.52	4.31	73.56	77.48	15
6	Assessment arrangements and marking have been fair	73.48	3.25	72.00	74.96	16
10	I have received sufficient advice and support with my studies	70.52	6.60	67.52	73.53	17
12	Good advice was available for study choices	66.95	5.33	64.52	69.38	18
5	The criteria used in marking have been clear in advance	64.67	5.66	62.09	67.24	19
7	Feedback on my work has been prompt	54.95	9.15	50.79	59.12	20
8	I have received detailed comments on my work	53.86	8.52	49.98	57.74	21
9	Feedback on my work has helped me clarify things	51.95	8.19	48.23	55.68	22
	All questions	**76.06**	**12.22**	**74.95**	**77.18**	

Table 6: % of students who definitely agree with NSS statements: RLUK members

Source: National Student Survey 2009

				95% CI		
Q	**Question text**	**Mean**	**S.D.**	**Lower**	**Upper**	**Rank**
17	I have been able to access general IT resources	49.67	7.98	46.03	53.30	1
16	**The library resources and services are good enough**	**47.19**	**8.57**	**43.29**	**51.09**	**2**
4	The course is intellectually stimulating	46.71	7.53	43.29	50.14	3
11	I have been able to contact staff when I needed to	41.29	6.03	38.54	44.03	4
20	My communication skills have improved	40.62	5.57	38.08	43.16	5
22	Overall, I am satisfied with the quality of the course	37.57	7.00	34.38	40.76	6
3	Staff are enthusiastic about what they are teaching	37.48	6.73	34.41	40.54	7
18	I have been able to access specialised equipment, etc.	37.10	7.18	33.83	40.36	8
13	The timetable works efficiently	36.43	3.96	34.63	38.23	9
14	Changes in the course have been communicated effectively	33.52	5.55	31.00	36.05	10
21	I feel confident in tackling unfamiliar problems	33.52	4.46	31.50	35.55	10
19	The course has helped me present myself with confidence	31.24	4.33	29.26	33.21	12
15	The course is well organised and is running smoothly	30.38	5.61	27.83	32.93	13
12	Good advice was available for study choices	26.00	5.04	23.71	28.29	14
10	I have received sufficient advice and support with my studies	23.81	6.22	20.98	26.64	15
6	Assessment arrangements and marking have been fair	23.48	3.28	21.98	24.97	16
1	Staff are good at explaining things	23.43	4.69	21.30	25.56	17
5	The criteria used in marking have been clear in advance	22.67	3.79	20.94	24.39	18
2	Staff have made the subject interesting	22.48	4.57	20.40	24.56	19
8	I have received detailed comments on my work	16.19	4.59	14.10	18.28	20
9	Feedback on my work has helped me clarify things	15.14	4.85	12.93	17.35	21
7	Feedback on my work has been prompt	15.05	4.85	12.84	17.26	22
	All questions	**31.41**	**11.62**	**30.34**	**32.47**	

Tables 1-6 show just how much students appreciate library resources and services (Q16) in relation to all other aspects of university provision. Q16 is consistently within the top six, whichever way you report the data. The standard deviation for Q16 tends to be somewhat higher than for most other aspects of provision, so the best must be very good indeed.

The figure below compares the individual results for RLUK members (green) and all other HEIs (blue). Overall, there is a very wide spread of satisfaction across the whole sector, but RLUK institutions cluster very firmly at the topmost end.

Figure 1: Satisfaction with aspects of provision: RLUK and non-RLUK members compared

Clustered scatterplot

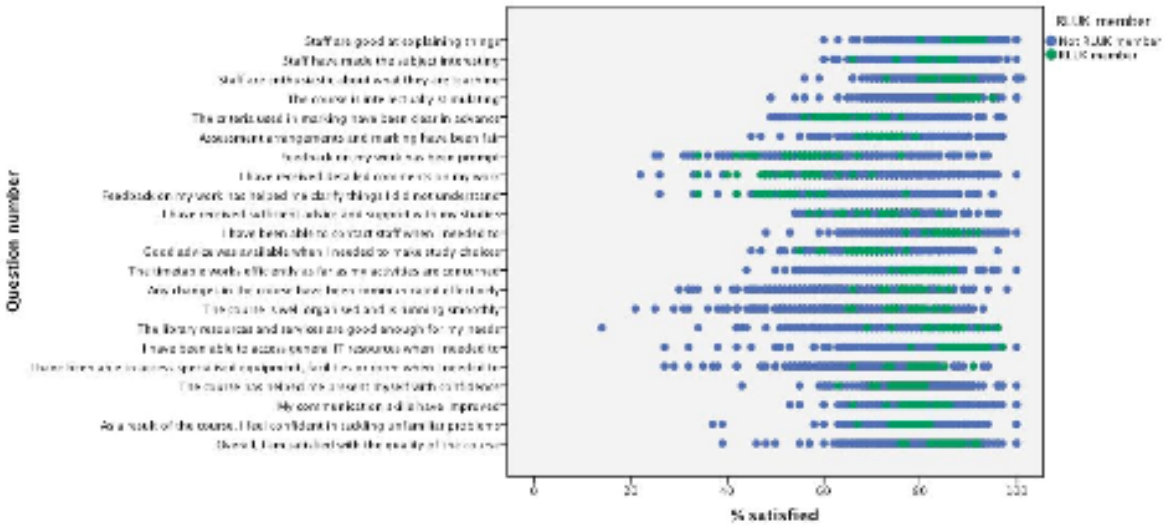
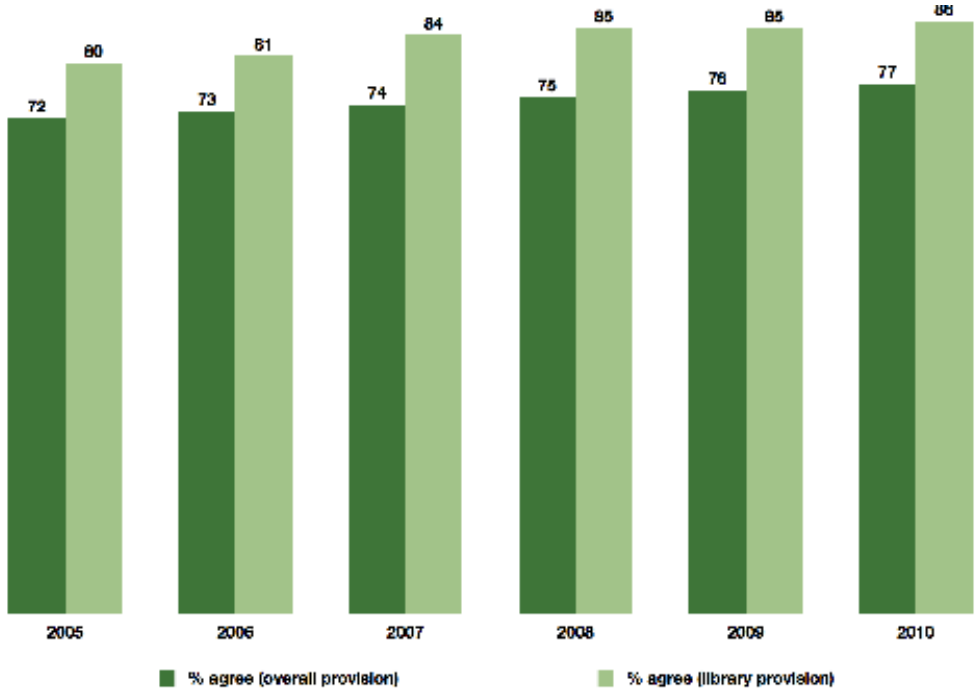


Figure 2: Overview of NSS results: RLUK members, 2004/05 to 2009/10

Percentages of students in agreement


72
80
73
81
74
84
75
85
76
85
77
86
2005
2006
2007
2008
2009
2010
% agree (overall provision)
% agree (library provision)

How much variation is there in library satisfaction?

Table 7: Library satisfaction (NSS Q16): Differences by RLUK membership status***

Analysis of variance (ANOVA) test

				95% Confidence interval for mean			
	n	*Mean*	*S.D.*	*Lower bound*	*Upper bound*	*Minimum*	*Maximum*
RLUK members	21	83.7	6.48	80.8	86.7	70	97
RLUK non-members	107	77.2	8.66	75.5	78.8	53	94
All	**128**	**78.2**	**8.68**	**76.7**	**79.8**	**53**	**97**

ANOVA statistics: F=10.99, d.f.=1, p<0.1%

Open University included

RLUK members score very significantly higher (by 6.5 percentage points) than the rest of the sector in terms of student agreement with NSS Q16.

Table 8: Library satisfaction (NSS Q16): Differences by university sector***

Analysis of variance (ANOVA) test

				95% Confidence interval for mean			
	n	*Mean*	*S.D.*	*Lower bound*	*Upper bound*	*Minimum*	*Maximum*
Russell Group	20	84.3	6.30	81.4	87.3	70	97
Million+ Group	22	80.8	4.86	78.6	82.9	65	89
1994 Group	19	76.8	10.16	71.9	81.7	53	90
University Alliance	22	76.7	7.02	73.6	79.8	60	89
Non-aligned	44	75.7	9.82	72.7	78.7	56	94
All	**127**	**78.3**	**8.71**	**76.7**	**79.8**	**53**	**97**

ANOVA statistics: F=4.63, d.f.=4, p<0.1%

Open University excluded.

The table above shows that there are statistically highly significant differences in library satisfaction by university sector. As might have been expected, the Russell Group is at the top. The table below shows that the source of that significant difference is clear blue water between the Russell Group and Million+ institutions at the top and the rest of the sector.

This is indicative of serious differences in student satisfaction across the whole sector.

Table 9: Library satisfaction (NSS Q16): Differences by university sector***

Post hoc test (Tukey's b)

		Subset for alpha = 0.05	
	n	*Group 1*	*Group 2*
Non-aligned	44	75.7	
University Alliance	22	76.7	
1994 Group	19	76.8	
Million+ Group	22	80.8	80.8
Russell Group	20		84.3

Open University excluded.

Does size matter?

Table 10: Library satisfaction (NSS Q16) and institutional size (*n*=127)

Bivariate correlation (Spearman's rho)

		The library resources are good enough for my needs (NSS Q16)
Academic staff (FTE)***	*Correlation coefficient*	0.370
	Significance	0.000
Students (FTE)***	*Correlation coefficient*	0.280
	Significance	0.001
Total users (FTE)***	*Correlation coefficient*	0.323
	Significance	0.000
Net library expenditure***	*Correlation coefficient*	0.377
	Significance	0.000
Total institutional expenditure***	*Correlation coefficient*	0.377
	Significance	0.000

This table shows five proxy measures for the size of the various institutions. In all cases, there is a very significant positive correlation between student satisfaction and size. So, the conclusion is larger institutions achieve higher ratings. To put this in a slightly different way, if we take total users as our proxy, then about 10 per cent (100 times the square of the correlation coefficient) of the variance in the student ratings can be explained by the size of the library.

For this reason (see Annex 2), we have created a series of derived indicators from the raw Sconul data, expressing them per student FTE or per user FTE, as seemed most appropriate. So the main analyses in this report create a more level playing field by accounting for the differences in size between institutions.

Is library satisfaction related to overall course satisfaction?

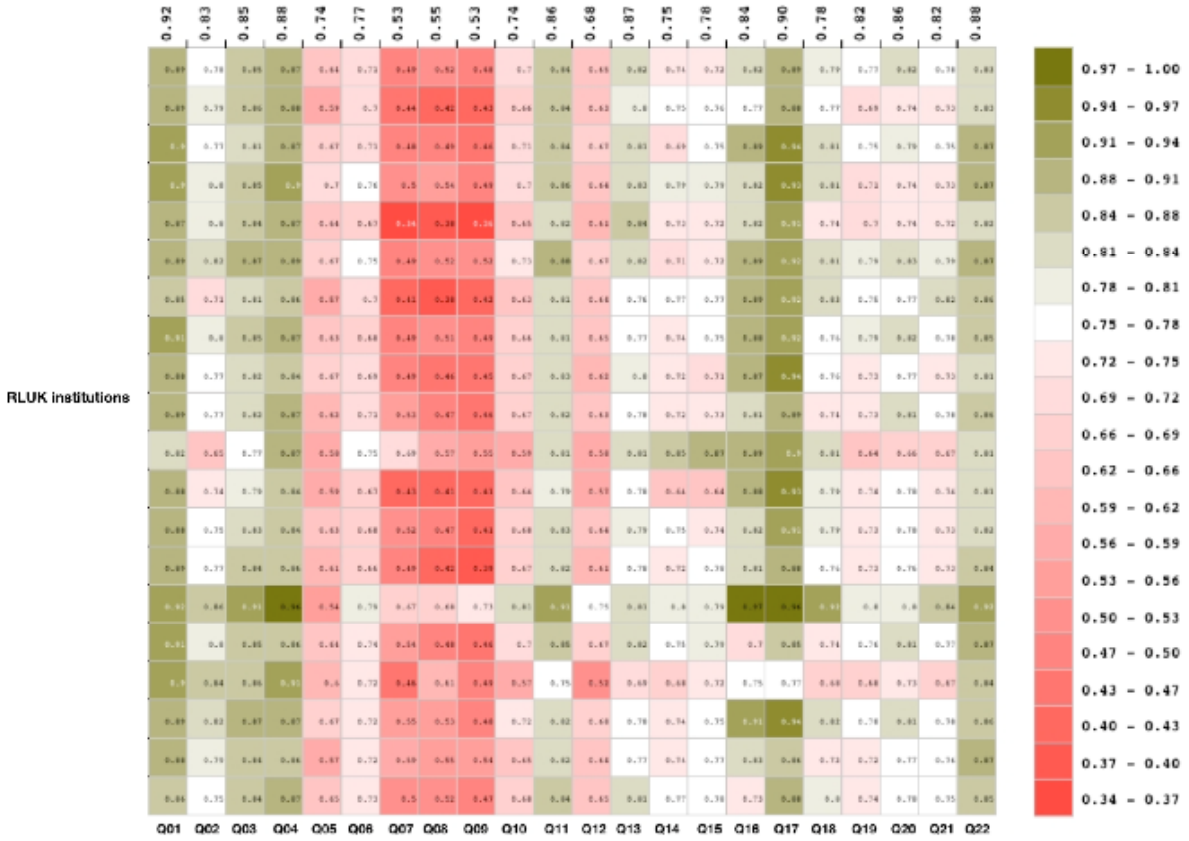
In this section we look at the individual scores in the NSS for RLUK members. The heat map on overleaf needs some explanation. The columns represent the 22 NSS questions (see Annex 1 for the wordings). The rows are RLUK members. The cells contain the

ratings given by the students for that aspect of provision (as measured by the percentage that mostly or definitely agree with the statements).

The median score across all 22 questions is 0.77 (77 per cent) and that is coded white. Higher scores are indicated by greens of increasing density, lower scores by reds.

So, looking down the column for Q16 we see a pretty consistent pattern of mainly green cells (so library provision is getting ratings in the upper half of all the ratings given). Contrast this with Q7-9 (student feedback), where there is clearly a lot to do.

Figure 3: Heat map showing distribution of 2009 NSS scores by question and RLUK member



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So, library satisfaction at RLUK institutions looks pretty healthy. But is library satisfaction related to overall course satisfaction?

The evidence below (across all 128 institutions) is that the two are positively correlated with a high degree of statistical significance. We can conclude that they are not independent but the effect is relatively small – library satisfaction explains 2.6 per cent of the variance in overall satisfaction scores. However, the wording of Q22 is crucial here ("Overall, I am satisfied with the quality of the course") and a more general question, e.g. "Overall, I am satisfied with the quality of the institution") might have elicited a different outcome.

Table 11: Library satisfaction (NSS Q16) and overall course satisfaction (NSS Q22) [all 128 institutions]

Non-parametric partial correlation (Kendall's tau-b) controlling for institutional size

		Overall, I am satisfied with the quality of the course (NSS Q22)
The library resources are good enough for my needs (NSS Q16)	*Correlation coefficient*	0.161***
	Significance	0.009

We ran a stepwise linear regression on overall course satisfaction using the full range of derived Sconul indicators.

Table 12: Library satisfaction (NSS Q16) and overall course satisfaction (NSS Q22) [all 128 institutions]

Stepwise linear regression, controlling for institutional size

	Unstandardized		*Standardized*	*t*	*Sig.*
	B	*S.E.*	*Beta*		
(Constant)	80.65	1.90		42.47	0.00
Staff hours spent training per student FTE***	75.59	22.53	0.58	3.36	0.01
Annual loans per FTE user***	0.08	0.03	0.57	-3.31	0.01

ANOVA statistics: F=12.13, d.f.=2, p<0.001

Two aspects of library provision emerged as the best predictors of overall course satisfaction: staff hours spent in training per student FTE and annual loans per FTE user.

This simple model offers a good fit (R2=0.708) to the data and encourages the following `thought experiment'. There is little that libraries can immediately do to increase the number of loans. However, staff training is directly under their control. The logic of the model above, is that if staff training were to increase by one standard deviation, then we should expect to see an increase in overall course satisfaction of one standard deviation times the standardized beta coefficient, all other things being equal. To put this in its crudest terms, doubling staff training per user would be roughly equivalent to raising overall course ratings by a couple of percentage points.

This is a deeply abstract exercise, but it does identify what appears to be a key library driver of overall course satisfaction. This would certainly fit with CIBER's ongoing Google Generation research that is revealing some deep concerns about information literacy among today's undergraduates in particular. More engagement would also create more of a personal bond between the respondents and the library.

What are the determinants of library satisfaction?

We now turn to Q16 (library satisfaction) and find that there is a significant positive correlation between satisfaction and a whole range of size-independent indicators of library provision. These are listed in descending order of importance.

One thing is striking is the weight given to staffing issues, perhaps a little more unexpected than obvious things like the availability of study places?

Table 13: Library services and provision: correlations with library satisfaction
Non-parametric partial correlation (Kendall's tau-b) controlling for institutional size

	The library resources are good enough for my needs (NSS Q16)
Professional staff as a percentage of total library staff***	0.403
Total gross library expenditure per FTE user***	0.394
Net library expenditure per FTE user***	0.384
Total expenditure on information provision per FTE user***	0.365
Library floor space per student FTE***	0.360
Full text downloads per FTE user***	0.344

Study place hours per week per student FTE***	0.331
Total serial subscriptions per FTE user***	0.318
Total study places per student FTE***	0.312
Total library posts per FTE user***	0.283
Professional library posts per FTE user***	0.280
Total institutional expenditure per FTE user**	0.193

Postscript: The Times Higher Student Experience Survey (THESES)

The THESES survey asks students the following question: "Based on your experience, how strongly do you agree that your university offers the following?". Answers are recorded on a 7-point scale where 1=`Strongly disagree' and 7=`Strongly agree'. The areas of provision and their post fieldwork scoring weights (in brackets) are given below:

High quality staff/lectures (2)
Helpful interested staff (2)
Well structured courses (2)
Good social life (2)
Good community atmosphere (2)
Good environment on campus (2)
Good extra-curricular activities (2)
High quality facilities (2)
Personal requirements catered for (2)
Good student union (1.5)
Good support/welfare (1.5)
Good relationship with teaching staff (1.5)
Centralised facilities (1.5)
Industry connections (1.5)
Good accommodation (1.5)
Security (1.5)
Cheap shop/bar (1)
Tuition in small groups (1)
Fair workload (1)
Sports facilities (1)
Library (1)

Note that library provision is unweighted in the final aggregation and so has relatively little effect on the overall rating. In the NSS all areas of provision are treated as of equal importance.

Table 14: Summary THESES scores, 2007 to 2010.
Mean ratings on a 7-point scale, where 7=`Strongly agree'

	Mean rating on all questions (RLUK)	Mean rating for library (RLUK)	Mean rating for library (non-RLUK)	RLUK library ranking (of 21)
2007	5.6	5.9	5.9	5

2008	5.6	6.0	5.8	2
2009	5.7	6.1	5.9	2
2010	5.7	6.1	5.9	2

Figure 4: Times Higher Student Experience Survey overview: RLUK members only

Mean ratings on a 7-point scale, where 7='Strongly agree'

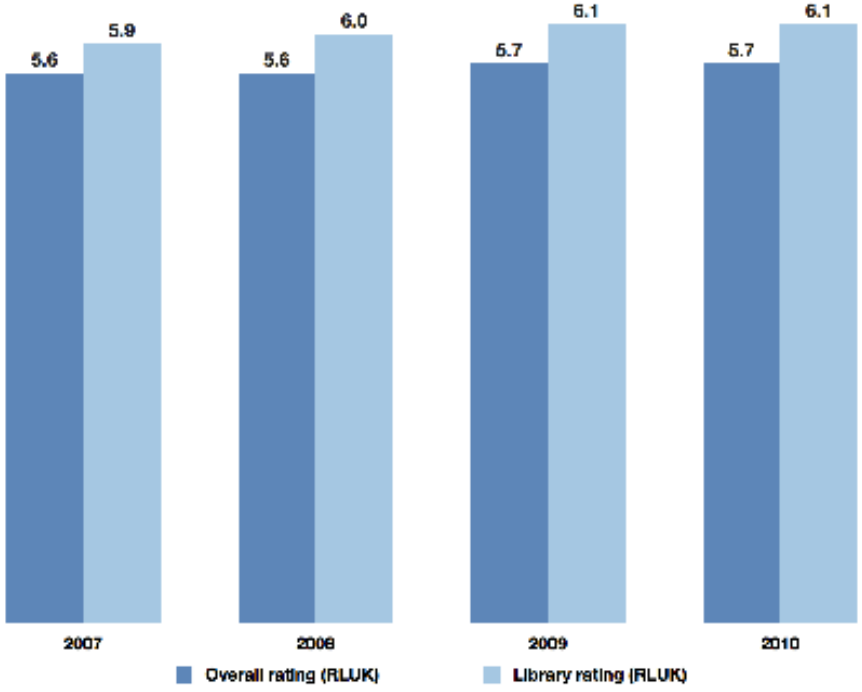
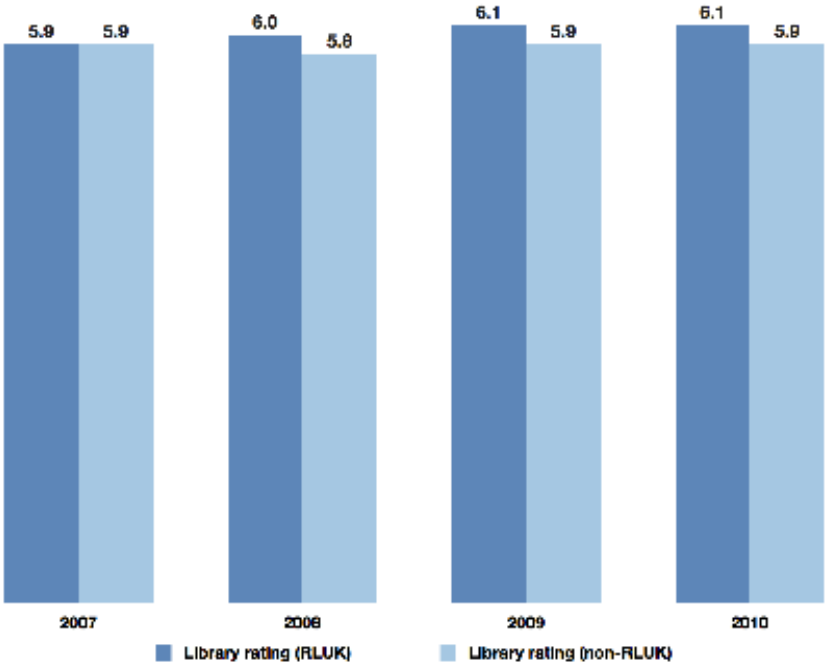


Figure 5: Times Higher Student Experience Survey overview: RLUK members and non-members compared for quality of library provision

Mean ratings on a 7-point scale, where 7='Strongly agree'



ANNEX 1: NSS questions

Q01. Staff are good at explaining things
Q02. Staff have made the subject interesting
Q03. Staff are enthusiastic about what they are teaching
Q04. The course is intellectually stimulating
Q05. The criteria used in marking have been clear in advance
Q06. Assessment arrangements and marking have been fair
Q07. Feedback on my work has been prompt
Q08. I have received detailed comments on my work
Q09. Feedback on my work has helped me clarify things I did not understand
Q10. I have received sufficient advice and support with my studies
Q11. I have been able to contact staff when I needed to
Q12. Good advice was available when I needed to make study choices
Q13. The timetable works efficiently as far as my activities are concerned
Q14. Any changes in the course have been communicated effectively
Q15. The course is well organised and is running smoothly
Q16. The library resources and services are good enough for my needs
Q17. I have been able to access general IT resources when I needed to
Q18. I have been able to access specialised equipment, facilities or room when I needed to
Q19. The course has helped me present myself with confidence
Q20. My communication skills have improved
Q21. As a result of the course, I feel confident in tackling unfamiliar problems
Q22. Overall, I am satisfied with the quality of the course

ANNEX 2: Sconul indicators

Raw indicators

Number of libraries
Library floor area
Total study places
Open access workstations
Study place hours per week
Workstation hours per week
Total catalogued book stock
Book acquisitions
Current serial titles
Number of ebooks
Academic staff (FTE)
Students (FTE)
Total users (FTE)
Annual visits
Average users in the library
Annual loans
Full text downloads
Ebook accesses
Active borrowers
ILL applications made
ILL applications satisfied
Staff hours spent training
User hours received in training
Sheets printed on library computers
Directional enquiries during sample week
Information enquiries during sample week
Total enquiries during sample week
Professional library posts
Total library posts
Book expenditure
Total serial subscriptions
Ebook expenditure
Total electronic expenditure
ILL expenditure
Total expenditure on information provision
Total equipment expenditure
Building utility expenditure
Total gross library expenditure
Net library expenditure
Total institutional expenditure

Derived indicators

Library floor area per student FTE*
Total study places per student FTE*
Open access workstations per student FTE*
Study place hours per week per student FTE*
Workstation hours per week per student FTE*
Total catalogued book stock per FTE user**
Book acquisitions per FTE user**
Current serial titles per FTE user**
Number of ebooks per FTE user**
Annual visits per student FTE*
Average users in the library per student FTE*
Annual loans per FTE user**
Full text downloads per FTE user**
Ebook accesses per FTE user**
Active borrowers per FTE user**
ILL applications made per FTE user**
ILL applications satisfied per FTE user**

Staff hours spent training per student user*
User hours received in training per student FTE*
Sheets printed on library computers per student FTE*
Directional enquiries during sample week per student FTE*
Information enquiries during sample week per student FTE*
Total enquiries during sample week per student FTE*
Professional library posts per FTE user**
Total library posts per FTE user**
Book expenditure per FTE user**
Total serial subscriptions per FTE user**
Ebook expenditure per FTE user**
Total electronic expenditure per FTE user**
ILL expenditure per FTE user**
Total expenditure on information provision per FTE user**
Total equipment expenditure per FTE user**
Building utility expenditure per FTE user**
Total gross library expenditure per FTE user**
Net library expenditure per FTE user**
Total institutional expenditure per FTE user**
Professional staff as a percentage of total library staff

Dummy variables

RLUK members
University sector

ANNEX 3: List of institutions

Aberdeen
Aberystwyth
Anglia Ruskin University
Arts Institute at Bournemouth
Aston
Bangor
Bath
Bath Spa
Bedfordshire
Birkbeck
Birmingham
Bishop Grosseteste
Bolton
Bournemouth
Bradford
Brighton
Bristol
Brunel
Buckingham
Buckinghamshire Chilterns
Canterbury Christ Church
Cardiff
Central England
Central Lancashire
Chester
Chichester
City
Coventry
Cumbria
De Montfort
Derby
Dundee

Durham
East Anglia
East London
Edge Hill
Edinburgh
Essex
Exeter
Glamorgan
Glasgow
Glasgow Caledonian
Gloucestershire
Glyndwr
Goldsmiths
Greenwich
Harper Adams
Heriot-Watt
Hertfordshire
Huddersfield
Hull
Imperial
Institute of Education
Keele
Kent
King's College London
Kingston
Lancaster
Leeds
Leeds Metropolitan
Leicester
Lincoln
Liverpool
Liverpool Hope
Liverpool John Moores
London Metropolitan
Loughborough
LSE
Manchester
Manchester Metropolitan
Middlesex
Newcastle
Newman
Newport
Northampton
Northumbria
Norwich School of Art & Design
Nottingham
Nottingham Trent
Open
Oxford
Oxford Brookes University
Plymouth
Portsmouth
Queen Mary
Queen's Belfast
Reading
Roehampton
Rose Bruford College
Royal Agricultural College
Royal College of Music
Royal Holloway
Royal Northern College of Music
Salford
School of Pharmacy
Sheffield
Sheffield Hallam
SOAS
South Bank
Southampton
Southampton Solent
St Andrews
St George's Hospital Medical School
St Mark & St John

Strathclyde
Sunderland
Surrey
Sussex
Swansea
Swansea Institute
Teesside
Thames Valley
Trinity & All Saints College
Trinity College Carmarthen
UCL
Ulster
University College for the Creative Arts
University of the Arts
University of Wales Institute Cardiff
Warwick
West of England
Westminster
Winchester
Wolverhampton
Worcester
Writtle College
York
York St John