

JISC national e-books observatory project
Headline findings from the user surveys

CIBER, Final Report, November 2009

Background to the exit survey

In January 2008, CIBER invited students at all levels, teaching staff and researchers to take part in an online survey to provide some community benchmarks for the JISC national e-books observatory project. The response was overwhelming: 23,445 people answered, making this almost certainly the world's largest e-book survey. Detailed findings from this entrance user survey may be found on the JISC national e-books observatory project website¹.

We repeated the user survey, with only a few small changes, this January (2009) so that we could evaluate whether, and if so, how far, user attitudes and behaviour have moved on since the beginning of the experiment. More than 28 thousand responses (28,709) were received by the time the survey closed on 31 March, thus providing a very robust snapshot of how the academic community is responding to the increasing availability of e-books.

Raw headline data from the exit user survey may be found online at <http://tinyurl.com/nebo-exit>

Definitions

- The JISC national e-books observatory project is referred to in this report as the 'Observatory project'.
- The 'JISC disciplines' are business and management studies, engineering, medicine and media studies.
- Where the term 'JISC e-book' is used, it is specific to the 36 titles licensed for the Observatory project.

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¹ *Findings from the First User Survey*, JISC Collections, April 2008.
www.jiscebooksproject.org/wp-content/e-books-project-first-user-survey-a4-final-version.pdf

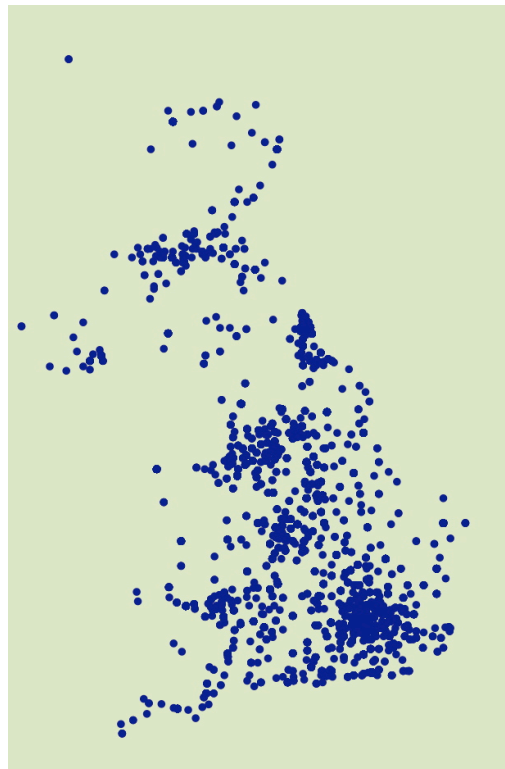
Key findings

Survey demographics

The scale and reach of both the entry and exit surveys is massive: Figure 1 captures the locations of the IP addresses of the respondents: again we see graphical evidence that the Observatory project reached every corner of the UK and that interest in e-books is unconstrained by geography.

Figure 1: Location of survey respondents

By IP address (n=28,709)

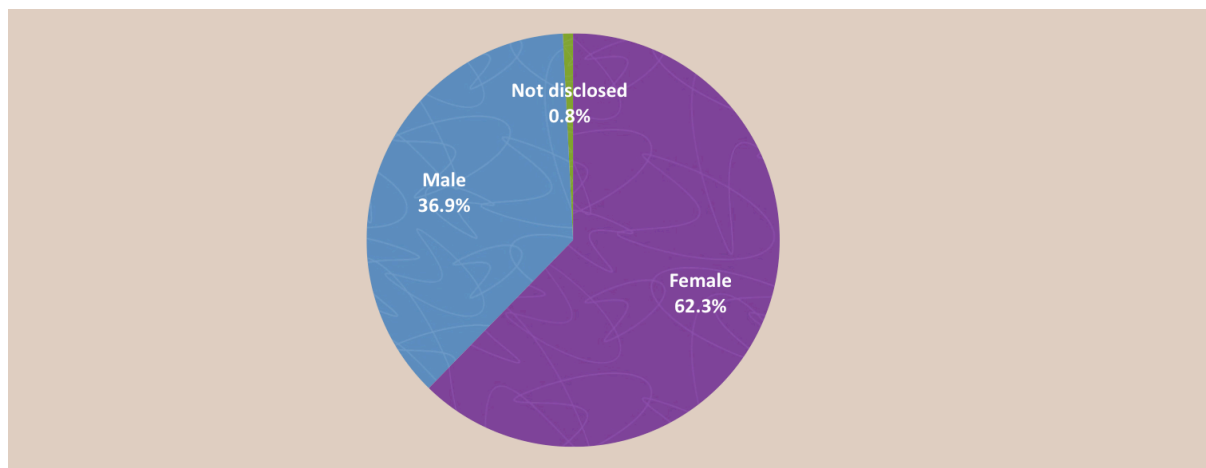


The graphics that follow relate, unless specified otherwise, to the exit user survey.

As might have been expected, the gender balance (Fig.2) of the responses reflects the fact that a majority of the student body is now female².

Figure 2: Gender balance of survey respondents

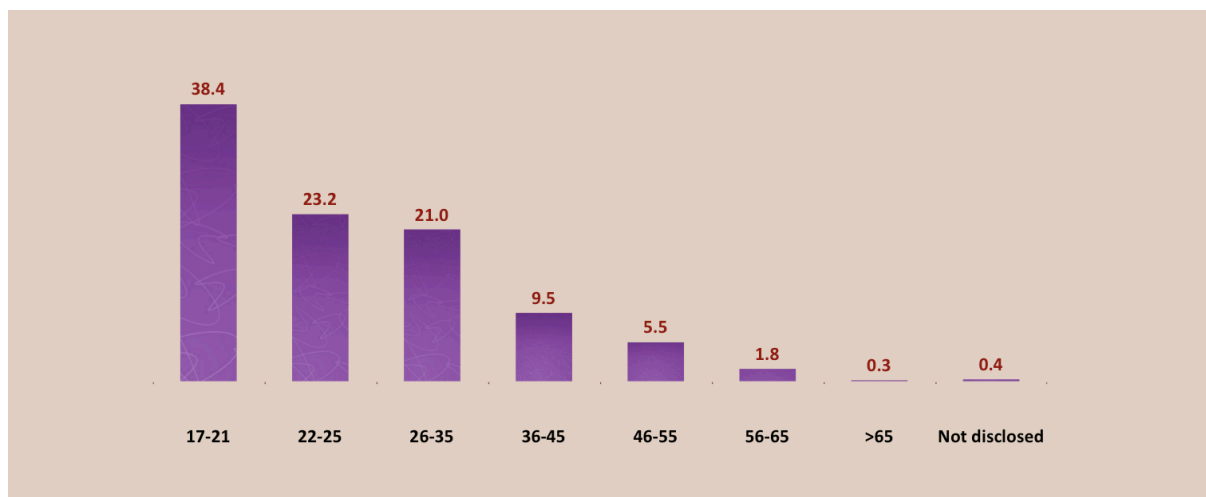
Percentages (n=26,289)



The age profile (Fig.3) correlates very closely with expectations, as evidenced by a cross check with official indicators produced by the Higher Education Statistics Agency (HESA). The profile is obviously tilted towards younger people, which point is worth bearing in mind: these people include the teachers, academics, researchers and university decision makers of the future, so their experiences and views on e-books are critical.

Figure 3: Age profile of survey respondents

Percentages (n=26,321)



In the next phase of the Observatory project, CIBER is undertaking a detailed study of the demographic characteristics of the two surveys, as well as taking a closer look at the changes that are evident over the twelve months that separated the questionnaires. What are the demographic

² For example, Table 14 of the current edition of *Higher Education Statistics for the UK*, Higher Education Statistics Agency, 2009, shows that 54.7 per cent of all students graduating in 2007/08 were female. The gender composition of the survey is still surprisingly dominated by women.

characteristics of heavy e-book users and non-users? To what extent are these predictable by subject discipline, type of university, full- or part-time status, age or other factors? This will provide publishers with valuable market intelligence and librarians with evidence for developing successful collection development policies.

The survey questionnaire was designed as a kind of 'funnel'. Links were very widely distributed across the fabric of many universities and so the survey was exposed to many people who were not directly impacted by the JISC e-books in the four key subject areas (business and management engineering, media studies and medicine). Those who did not use e-books were filtered out an early stage. Those who used e-books in any capacity, perhaps just for leisure, were probed about their attitudes and interests. The status of the full response (Fig.4) includes – in the green slice – academic staff without teaching contracts, researchers, librarians and administrators. These 'greens' are excluded from the analyses that follow after Fig.7.

Figure 4: Academic status of survey respondents

Percentages (n=27,700)

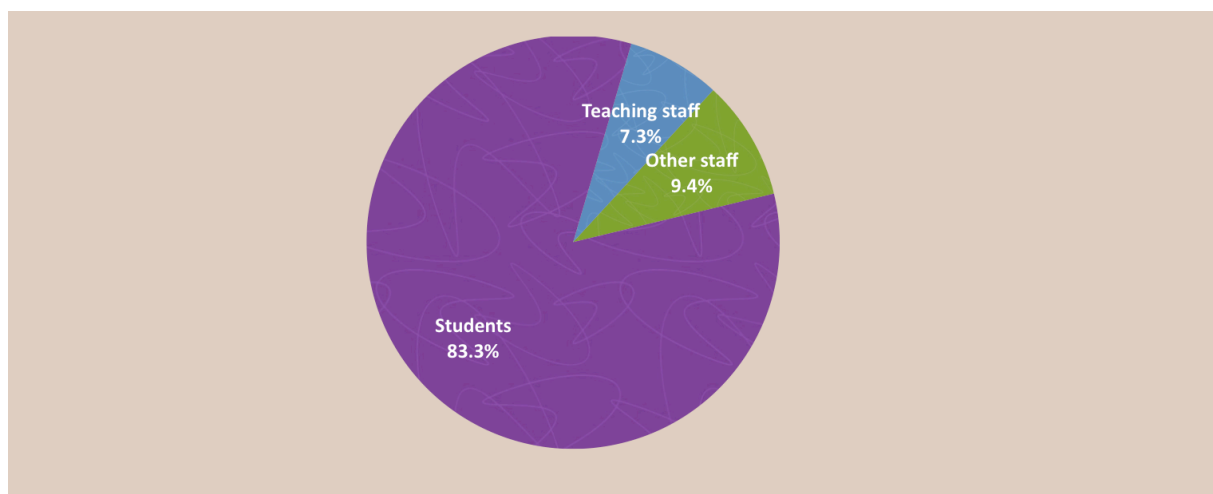
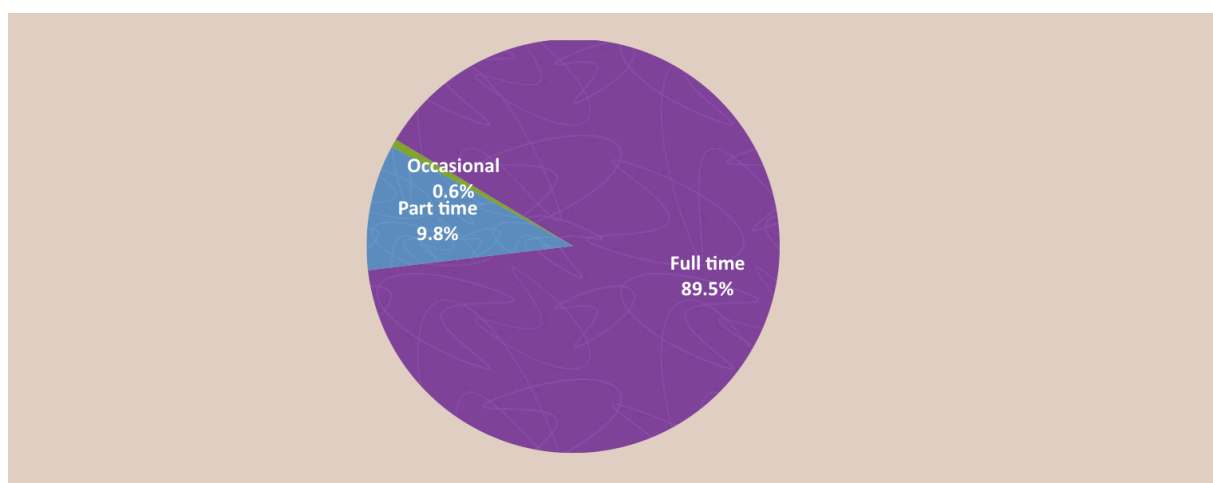


Figure 5: Students and their mode of study

Percentages (n=21,935)



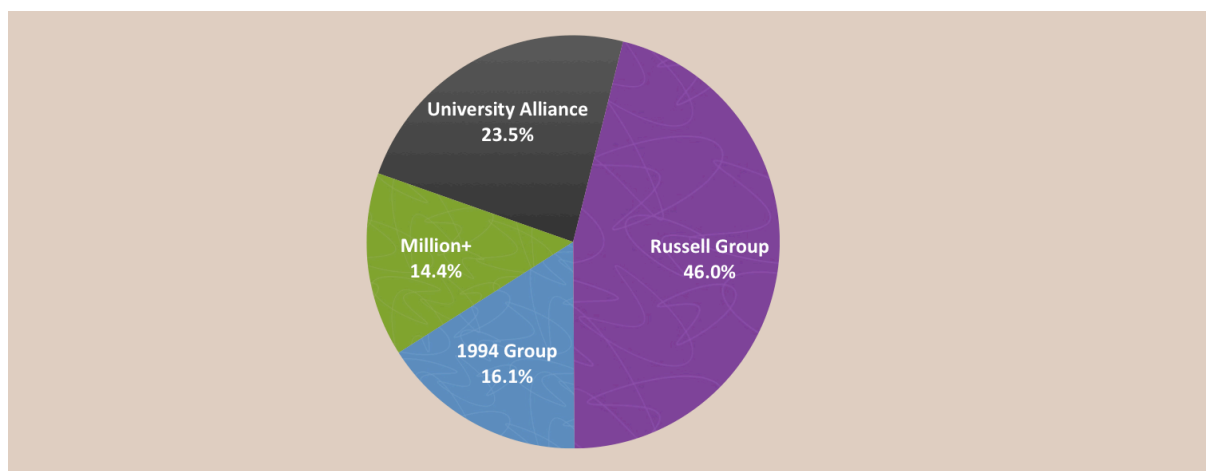
A key demographic for this project (Fig.5) is the differing needs and expectations of part-time and occasional students compared with their full-time colleagues. In a data vacuum, we might expect

part-time students to be more enthusiastic about the prospect of course text e-books than their full-time colleagues. This is partly, but only partly, borne out by the evidence: interest is high across nearly all segments. Further detailed findings will be presented in the extension study.

Now that the two surveys have been integrated into a single database, additional coding has become feasible. In this case (Fig.6), respondents are classified according to the affiliation of their current university. Somewhat to our surprise (and perhaps another myth buster) is that interest in the surveys was stronger among the more research-oriented universities of the Russell and 1994 Groups, than among teaching-led institutions. More analysis is needed here since it raises some interesting questions: the relatively small showing of the Million+ group is surprising.

Figure 6: Survey responses by university grouping

Percentages (n=21,399)

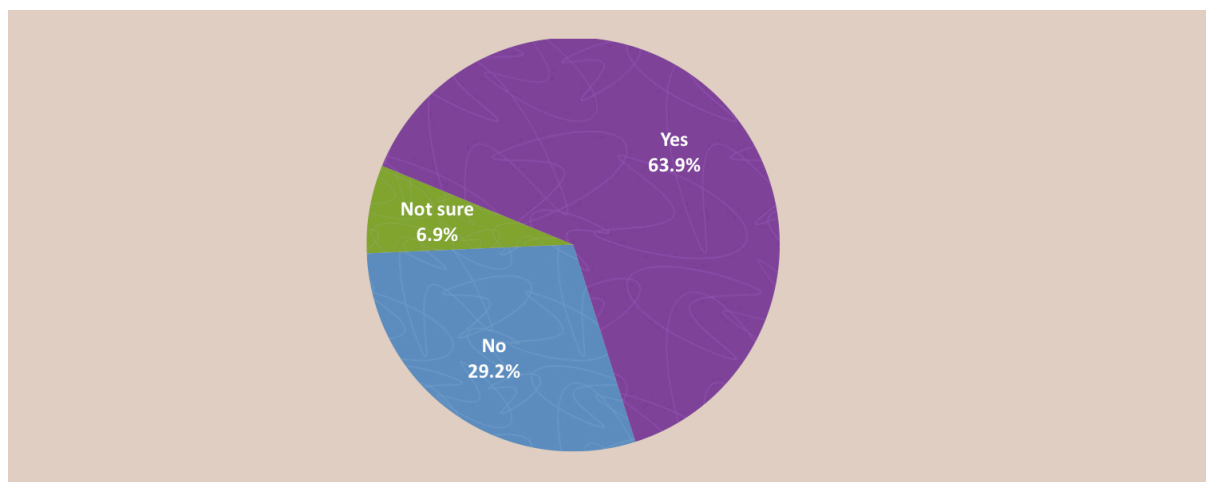


General interest in e-books

The preliminary questions in both surveys (and an early exit for non-users) related to general exposure to e-books: not necessarily those provided within the institution, nor necessarily for work- or study-related purposes. The exit survey confirms that a clear majority (almost 64 per cent and significantly up from the entry survey by more than five percentage points) of the university population has already been exposed to and used e-books.

Figure 7: General use of e-books by students and teachers

Do you use e-books (of any kind, not necessarily library-provided)? Percentages answering 'yes' (n=28,709)



In the case of two of the JISC disciplines at the heart of this project – business and management studies and media studies – the proportion of users is much higher than the general population (Fig.6) and growing (Fig.7 and Table 1).

Figure 8: General use of e-books by students in JISC disciplines

Do you use e-books (of any kind, not necessarily library-provided)? Percentages answering 'yes' (n=8,145)

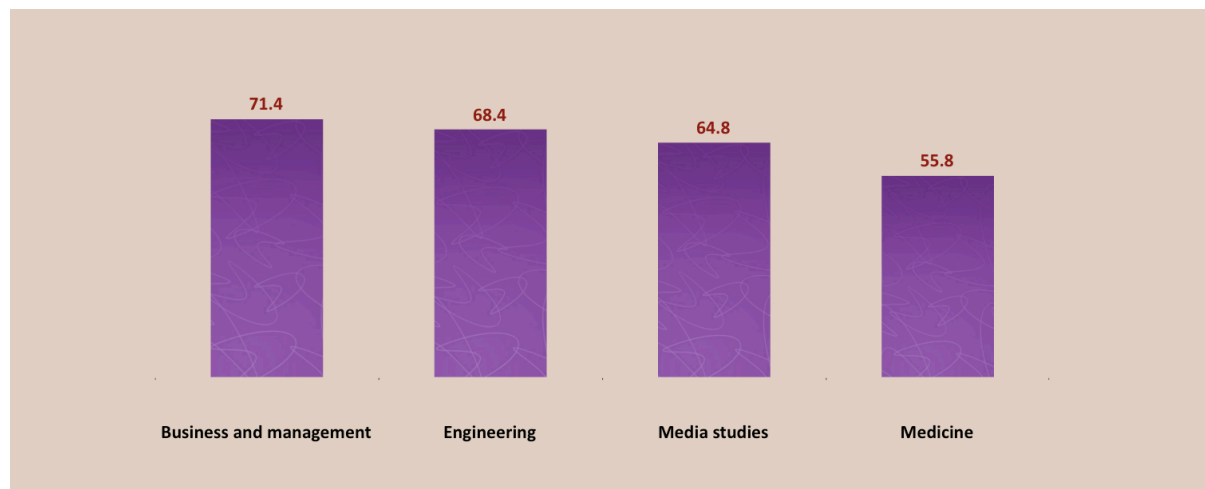


Figure 9: General use of e-books: students and teachers (entry and exit surveys compared)

Do you use e-books (of any kind, not necessarily library-provided)? Percentages answering 'yes' (n=44,777)

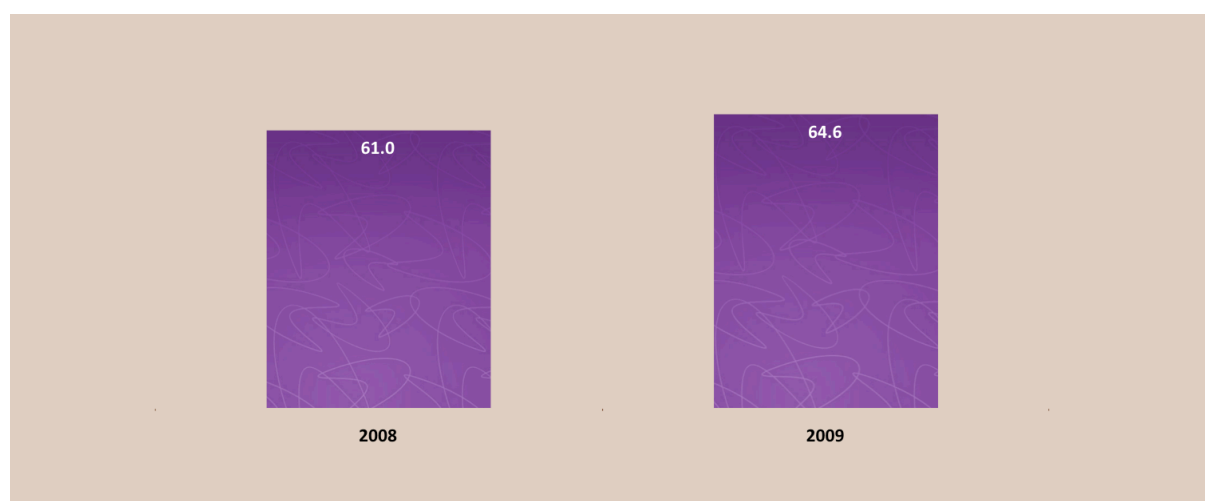


Table 1: JISC disciplines and other disciplines compared

Do you use e-books (of any kind, not necessarily library-provided)? Percentages and index (2008=100) (n=43,849)

<i>Those indicating yes</i>	2008	2009	Index
Students in a JISC discipline	63.2%	65.5%	103.6
All other students	61.4%	64.2%	104.6
Teachers in a JISC discipline	57.0%	63.5%	111.4
All other teachers	58.9%	64.9%	110.2

There is evidence here of an upward trend in e-book use, with university teachers rapidly closing the gap with the early 'Google Generation'. A clear majority of students and teaching academics now use e-books at some point, mainly for study-related purposes. This is a general question and relates not just to university life but for leisure and other interests outside work or study.

While we are still with use of e-books generally, the question of how these are sourced is presented in Fig.10 and Table 2.

Figure 10: Sources of e-books: students and teachers (entry and exit surveys compared)

Thinking back to the last time you used an e-book, how did you get hold of it? Percentages (n=44,777)

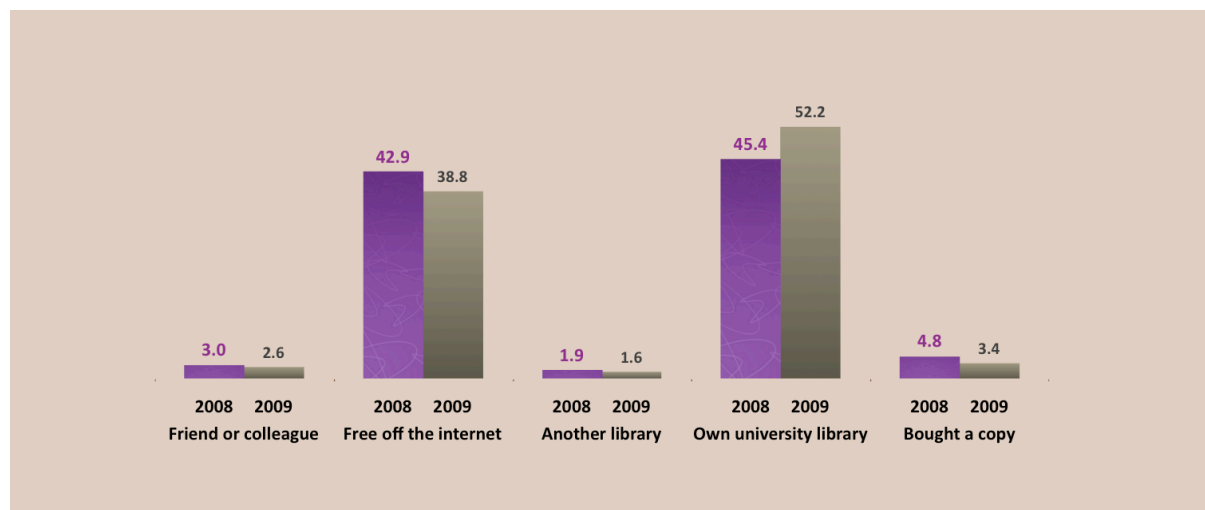


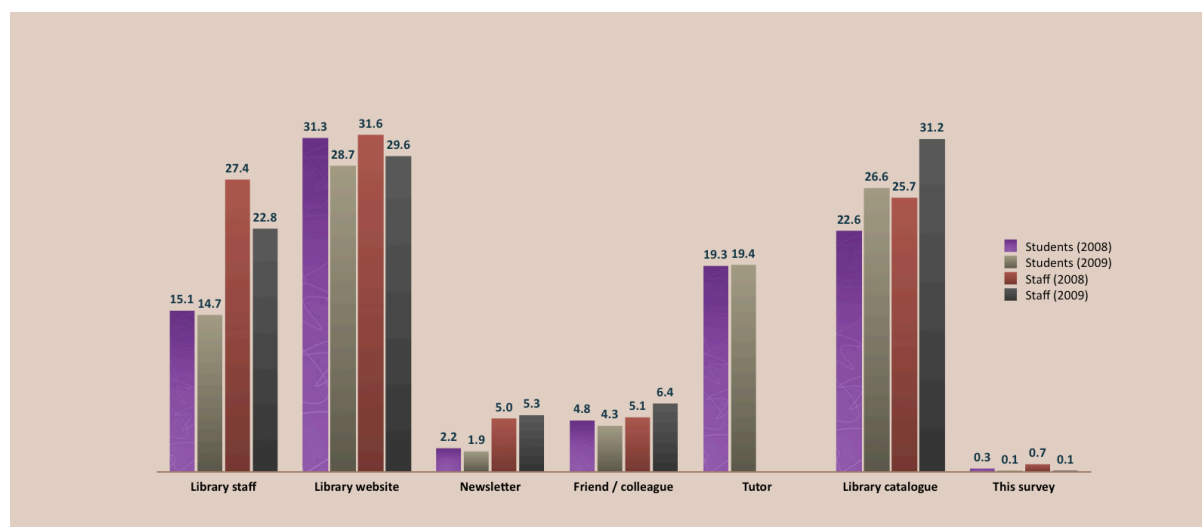
Table 2: Sources of e-books: students and teachers (entry and exit surveys compared)

Thinking back to the last time you used an e-book, how did you get hold of it? Percentages who answered 'from my university library' (n=44,777)

From my university library	2008	2009	Index
Students in a JISC discipline	43.5%	51.5%	118.4
All other students	45.5%	52.3%	114.9
Teachers in a JISC discipline	50.3%	54.0%	107.4
All other teachers	50.1%	56.8%	113.4

This question asked people how they got hold of their last e-book: perhaps by purchasing it, getting it free off the internet, from a friend or colleague, through their university library or another library. More information needs are being satisfied through library-provided e-books. A smaller proportion (38.4 per cent) reported getting their e-books from the open web in the exit survey compared with the entry survey (42.2 per cent). We do not know whether this is due to increased library availability, or simply more intensive use of what was there already. But university libraries are now the provider of first choice for the majority. This seems especially to be true of students in the JISC disciplines of the Observatory project.

Figure 11: Discovery of library e-books: students and teachers (entry and exit surveys compared)
How did you first find out about them? Percentages (n=19,699)



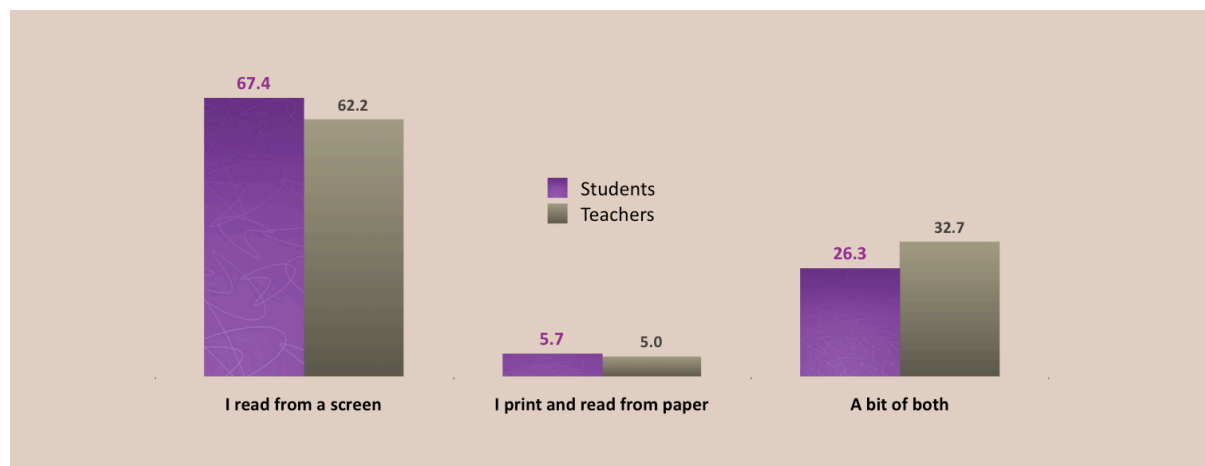
Staff and students find out about library e-book provision through a variety of channels, which suggests that a multi-pronged approach to their promotion is essential. Between 2008 and 2009, there was a significant lift in the numbers reporting that they had discovered library e-books through the catalogue. This is unsurprising but it highlights the need for librarians and publishers to work together to ensure that high quality machine-readable catalogue records are provided with each title.

Online reading behaviours

Once a user has access to an e-book, how do they consume its content? Fig.11 shows very clearly that most use takes place reading directly from the screen or a hybrid print / electronic approach. We hope that the interviews will shed further light on this issue, especially with regard to the tasks being undertaken at a particular point in time. But these figures hardly suggest that screen technologies are a major barrier to e-book use, as is often postulated.

Figure 12: Mode of reading e-book content: students and teachers

How did you read the contents? Percentages who answered 'I read the contents from a screen' (n=16,245)



This point is brought home very strongly in the next graphic (Fig.12) which, although it does show a steady decline in screen-only consumption with age, that decline is not as steep as might have been expected given certain popular assumptions about age and the use of technology. The issue is a complex one in any case: does the decline in Fig.12 relate primarily to habit, or to greater knowledge and sophistication in searching and finding information?

Figure 13: Mode of reading e-book content: all users by age

How did you read the contents? Percentages reading from the screen (n=15,459)



As regards typical session length, there can now be little argument: the self-reported user survey findings (Fig.13) and deep log analysis are very congruent.

Figure 14: Length of online reading sessions: students and teachers (entry and exit surveys compared)

Typically, how long do you think you spend reading an e-book from a screen in one session? Percentages (n=28,194)

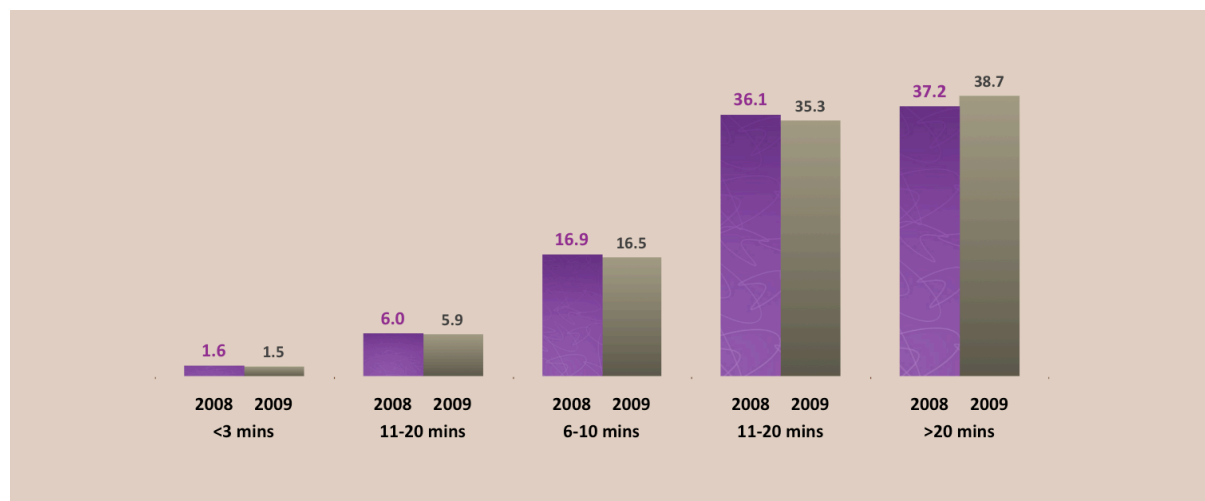


Table 3: Length of online reading sessions: students and teachers (entry and exit surveys compared)

Typically, how long do you think you spend reading an e-book from a screen in one session? Percentages and index (2008=100)

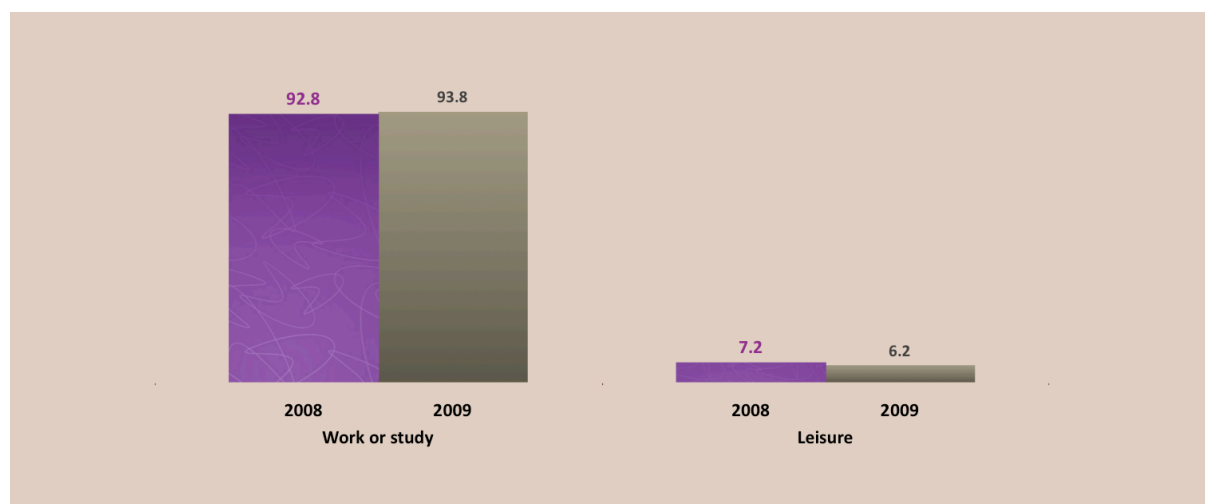
<i>Eleven minutes or longer</i>	2008	2009	Index
Students in a JISC discipline	74.1%	73.2%	98.8
All other students	75.0%	75.7%	100.9
Teachers in a JISC discipline	61.2%	61.2%	100.0

There is no evidence here of any change in fundamental online reading behaviour and this self-reported data is entirely consistent with what we know from the deep log analysis reported earlier. In comparison with our findings for many other digital scholarly platforms, MyiLibrary users dwell for a relatively long time.

Fig.14 underlines a consistent finding: e-books seem to be associated in the academic mind with work and study, not (yet) with leisure or information that relates to their lives outside the academy.

Figure 15: Reason for consulting e-books (entry and exit surveys compared)

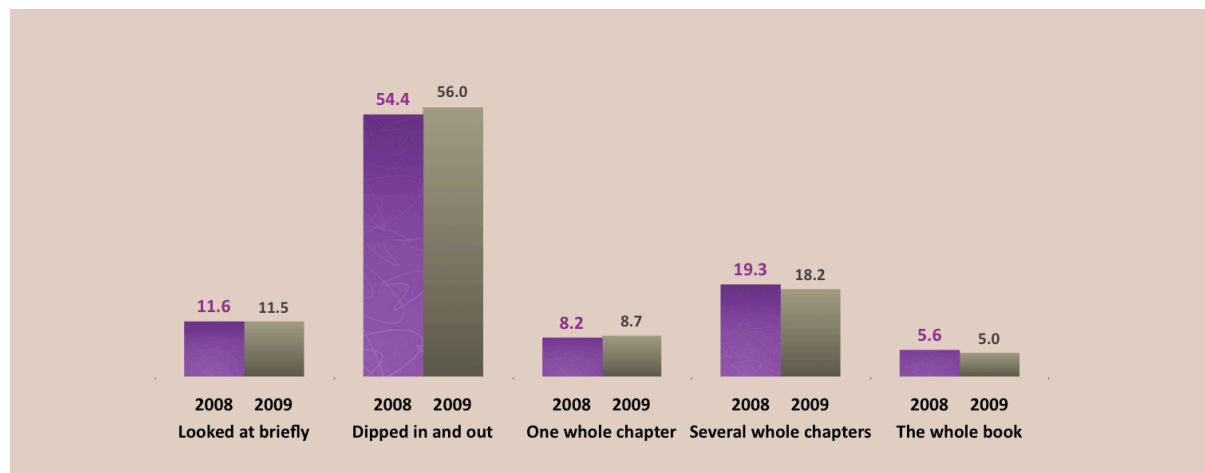
Why did you consult it (last e-book used)? Percentages (n=28,187)



We don't really know much about how hard copy books are actually used to support learning or research, but we know (and this is very much confirmed by the MyiLibrary analysis) that e-books are used like other electronic resources – at a level considerably that of the whole document, mostly for dipping or 'power browsing' (Fig.15). This is not simply a function of age and the 'Google Generation', it is typical across the span of ages and responsibilities (Table 4).

Figure 16: Extent of e-book content read online: students and teachers (entry and exit surveys compared)

How much of that e-book did you read online? Percentages (n=28,172)



Text

Table 4: Extent of e-book content read online: students and teachers (entry and exit surveys compared)

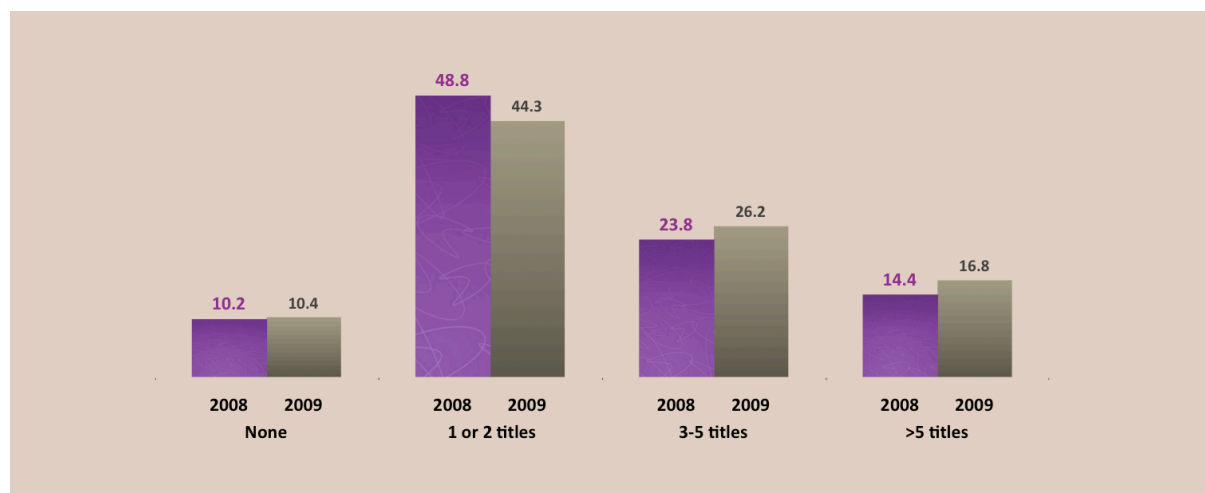
How much of that e-book did you read online? Percentages and index (2008=100)

<i>I dipped in and out of several chapters</i>	2008	2009	Index
Students in a JISC discipline	51.9%	53.5%	103.1
All other students	55.4%	57.3%	103.4
Teachers in a JISC discipline	60.0%	58.6%	97.7
All other teachers	60.1%	62.5%	104.0

Again, there is no evidence here of any change in fundamental behaviour: just like other consumers of scholarly information, e-book users surf the literature, dipping in and out and comparing resources. CIBER calls this 'power browsing', without passing any value judgement. A cavalier disregard for the etiquette of scholarly norms, or just how it is, knowledge discovery inside and within documents, a behaviour that publishers and librarians have not previously supported?

The evidence provided by the two surveys points strongly to a rapid upturn in the intensity of e-book use by students and by university teachers. A sizeable minority of each group - 14.4 per cent of students and 16.8 per cent of teachers - report that they consulted more than five titles in the past month (Fig.16).

Figure 17: Number of e-book titles consulted in the past month: students and teachers (entry and exit surveys compared)
How many e-books have you used in the past month? Percentages (n=28,139)



And these groups of relatively heavy users are clearly pleased with what they have found. The growth rates over just twelve months in terms of the number of frequent or heavy users is very positive: 35 per cent up in the case of teachers in the JISC disciplines (Table 5).

Table 5: Number of e-book titles consulted in the past month: students and teachers (entry and exit surveys compared)
How many e-books have you used in the past month? ? Percentages and index (2008=100)

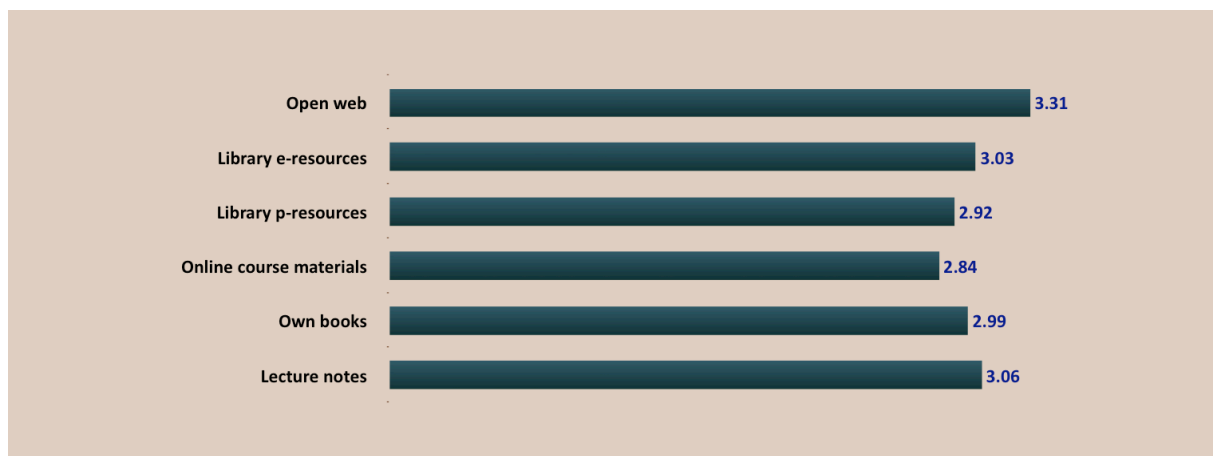
Three or more titles		2008	2009	Index
Students in a JISC discipline		40.0%	44.4%	111.0
All other students		38.2%	42.2%	110.5
Teachers in a JISC discipline		31.1%	42.0%	135.0
All other teachers		33.7%	39.9%	118.4

Academics, both students and teachers, are using more e-books each month, and the growth rates (more than ten per cent) suggest that they are really starting to catch on in a big way. This growth is quite remarkable for teachers in the four JISC disciplines, up 35 per cent!

How e-books fit with work and study patterns

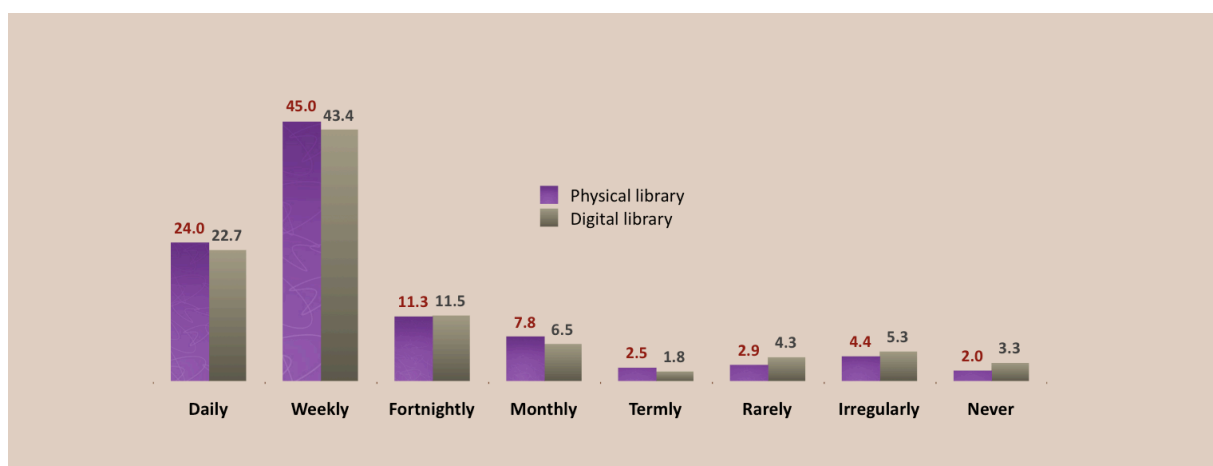
It is important to remember that e-books are just one of the information media that support student learning. The open web is still the resource that students rate as the one upon which they are most dependent to support their learning, a hardly unexpected finding. Library e-resources, including e-books, are the next most highly rated resource. The (relatively) low reported dependence on students' own copies of textbooks and on online course materials warrants further investigation: after all, these resources may reasonably be expected to be pre-selected and especially highly relevant to their courses.

Figure 18: Student dependence on information resources (entry and exit surveys combined)
How dependent are you on the following information resources to complete you academic assignments?
Average ratings (1=Not at all dependent, 5=Highly dependent) (n=39,457)



It is clear from Fig.18 that students continue to make very regular use of the library, in both its physical and digital manifestations, with more than four students in five visiting *both* at least once a fortnight.

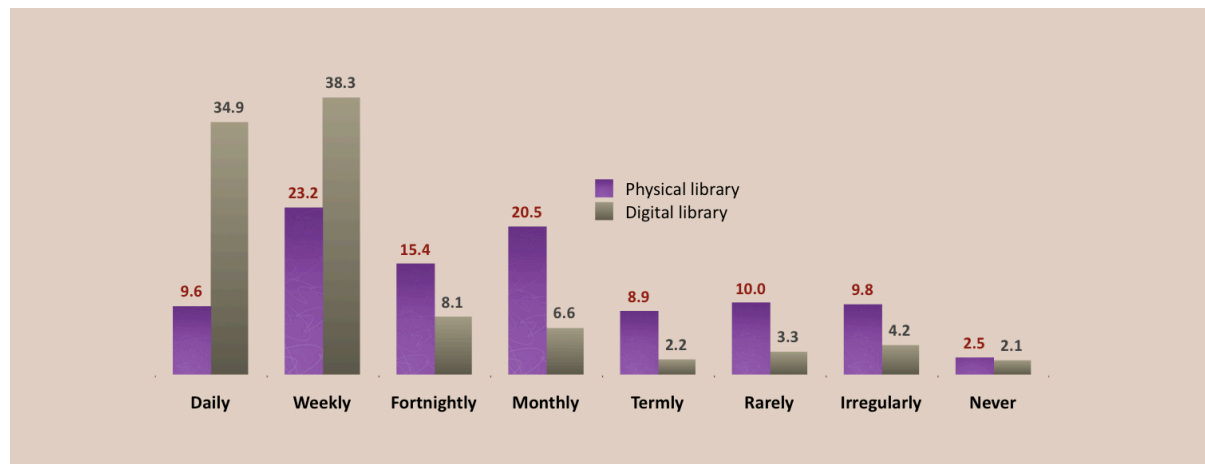
Figure 19: Frequency of library use (physically or digitally) by students (entry and exit surveys combined)
How often do you pay a visit to your university library, physically or virtually? Percentages (n=39,778)



However, and as documented elsewhere, faculty continue to exhibit a strong preference for the virtual library (Fig.19), although they can hardly be said to have deserted the bricks and mortar environment just yet – roughly half pay a visit at least once a fortnight.

Figure 20: Frequency of library use (physically or digitally) by teachers

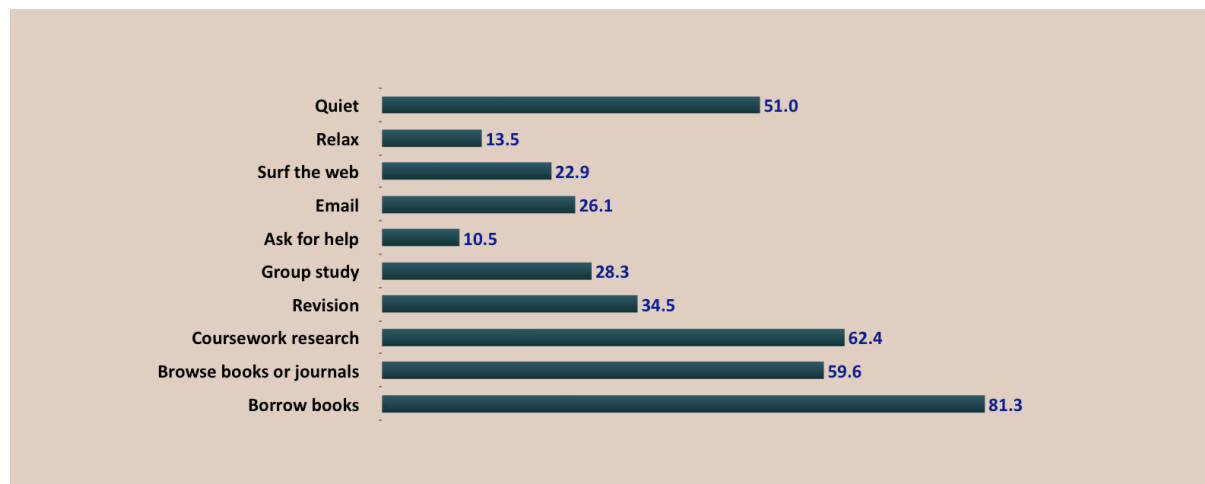
How often do you pay a visit to your university library, physically or virtually? Percentages (n=3,904)



Students' reasons for visiting the library – in person – are still very much driven by the need to access and digest information content, as well as a place in which to find quiet (Fig.20). These remain age old and enduring values, even in the two clicks Google culture that the media is so fond of.

Figure 21: Reasons for visiting the physical library: all students

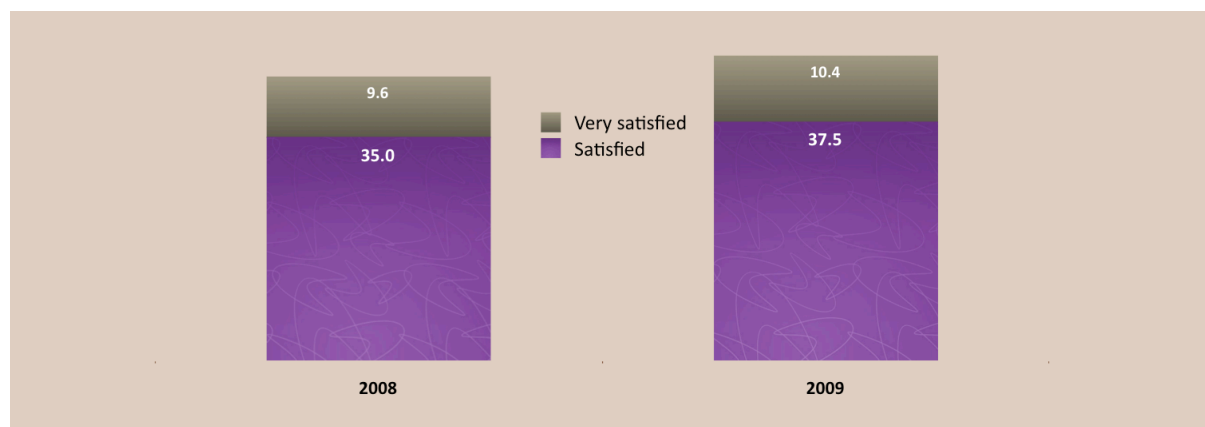
Why do you go the library in person? Percentages who answered 'yes' (n=23,224)



A surprising, and as yet unexplained, finding of the exit survey – when benchmarked against the entrance user survey – is that levels of student satisfaction with provision of printed course textbooks has risen significantly, despite difficult economic times (Fig.21).

Figure 22: Satisfaction with hard copy library provision: all students (entry and exit surveys compared)

Thinking about printed course textbooks, how satisfied are you with their availability in your university library? Percentages who are 'satisfied' or 'very satisfied' (n=38,599)



This effect (Table 6) is not limited to those in a JISC discipline and appears to be a general effect. More desk research is needed to discover what lies behind this – specifically if the general increase in e-book provision across the sector has made a significant impact on student perceptions. Some support for this notion can be found as Fig.23 on page 17.

Table 6: Satisfaction with hard copy library provision: all students (entry and exit surveys compared)

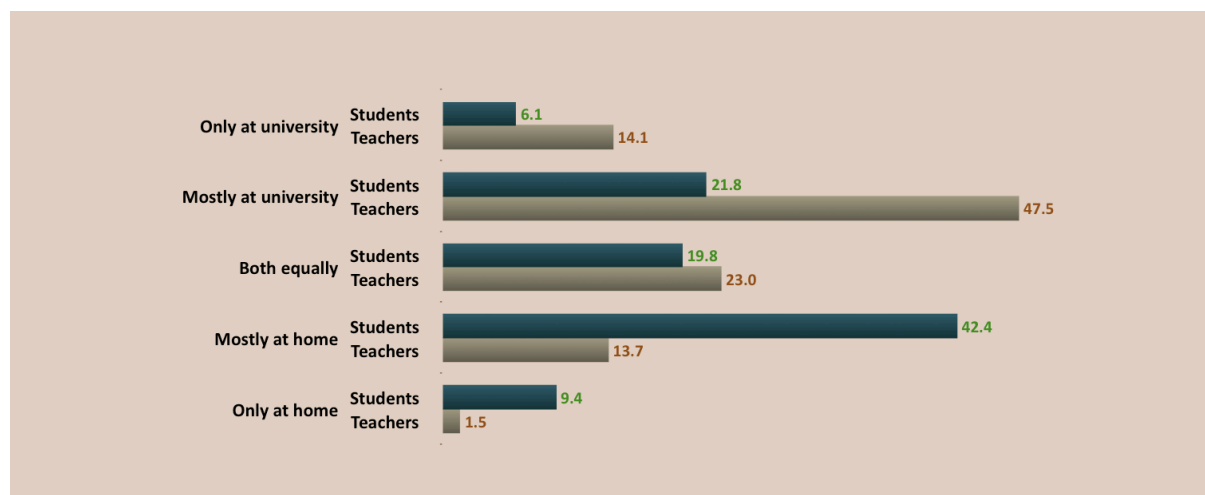
Thinking about printed course textbooks, how satisfied are you with their availability in your university library? Percentages who are 'satisfied' or 'very satisfied' and index (2008=100)

<i>Satisfied or very satisfied</i>	2008	2009	Index
Business students	43.3%	46.2%	106.7
Engineering students	50.5%	56.3%	111.5
Media studies students	44.9%	52.5%	116.9
Medical students	51.0%	53.7%	105.3
All other students	43.1%	46.3%	107.4

This is good news for libraries: across the board students report higher levels of satisfaction with print collections. It is too early to say what the likely cause is, but it is tempting to speculate, given the evidence throughout this bulletin, that student information-seeking behaviour may be shifting in favour of library provided electronic content.

One very obvious and clear benefit of e-books is their convenience: they can be consulted 24/7 from any location with a broadband connection. More than half of students now visit their university's digital library mostly or exclusively from home (Fig.22). A stronger *prima facie* case for library and publisher investment in course text e-books could hardly be made.

Figure 23: Visiting the digital library: all students and teachers (entry and exit surveys compared)
Where do you mostly access your university library online? Percentages (n=40,344)



Trends in e-book consumption

Library-provided e-books are becoming more popular and are now used by a majority of students and university teachers (Figs.23 and 24).

Figure 24: Use of library-provided e-books: all students and teachers (entry and exit surveys compared)
Have you used any of the electronic books that are available from your university library? Percentages answering 'yes' (n=41,359)

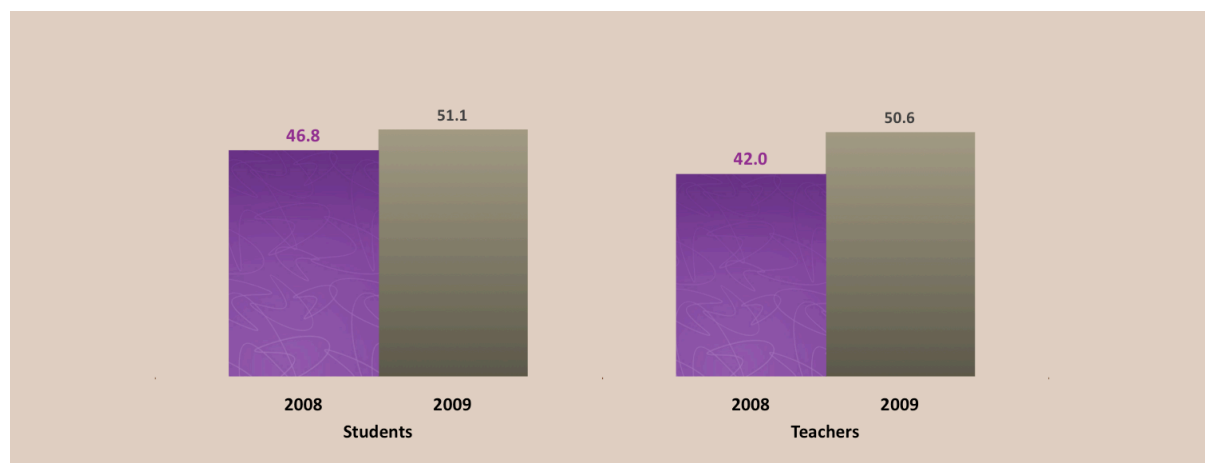
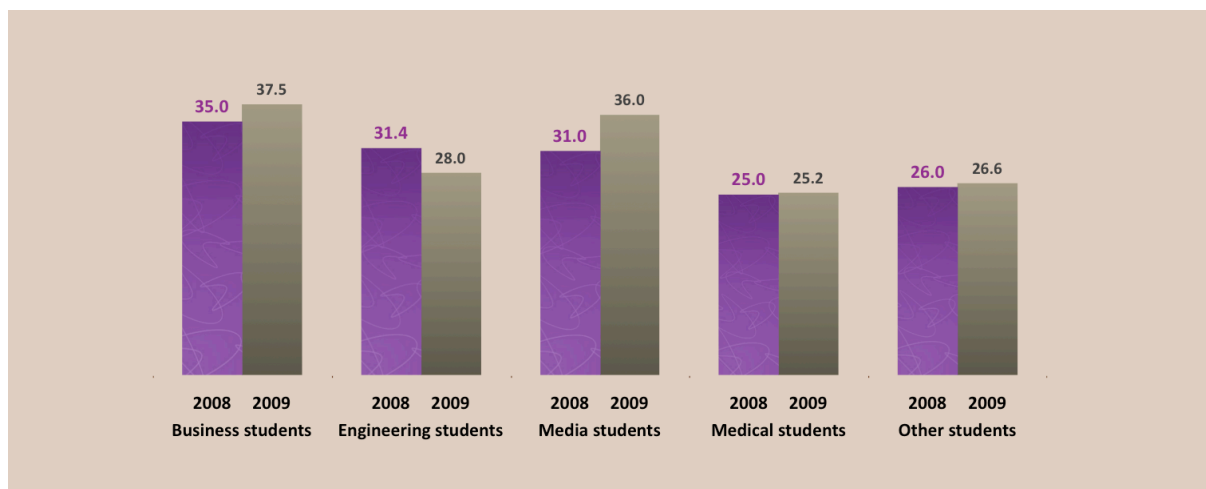


Figure 25: Trends in e-book consumption: students (entry and exit surveys compared)

How typical was your use of university library e-books this month? Percentages who replied 'a lot more' or 'a little more' (n=18,386)



Comparing the data in Fig.24 and 25 it is difficult to find any meaningful pattern, except that (a) the general trend is towards greater consumption, and (b) repeating an earlier finding, there is a front of enthusiastic users who are driving forward on e-books and this is not a small minority.

Figure 26: Trends in e-book consumption: teachers (entry and exit surveys compared)

How typical was your use of university library e-books this month? Percentages who replied 'a lot more' or 'a little more' (n=1,728)

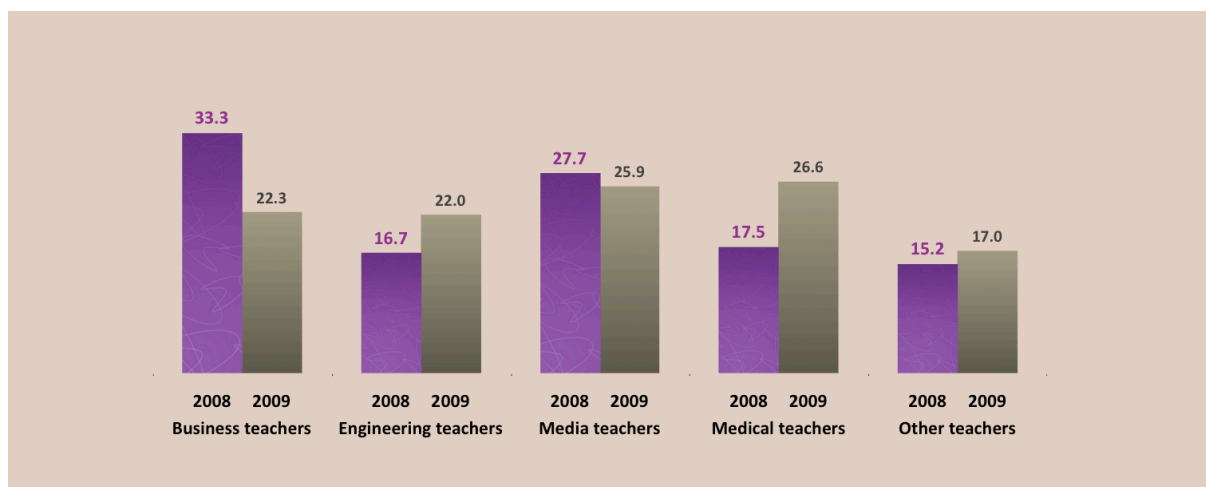
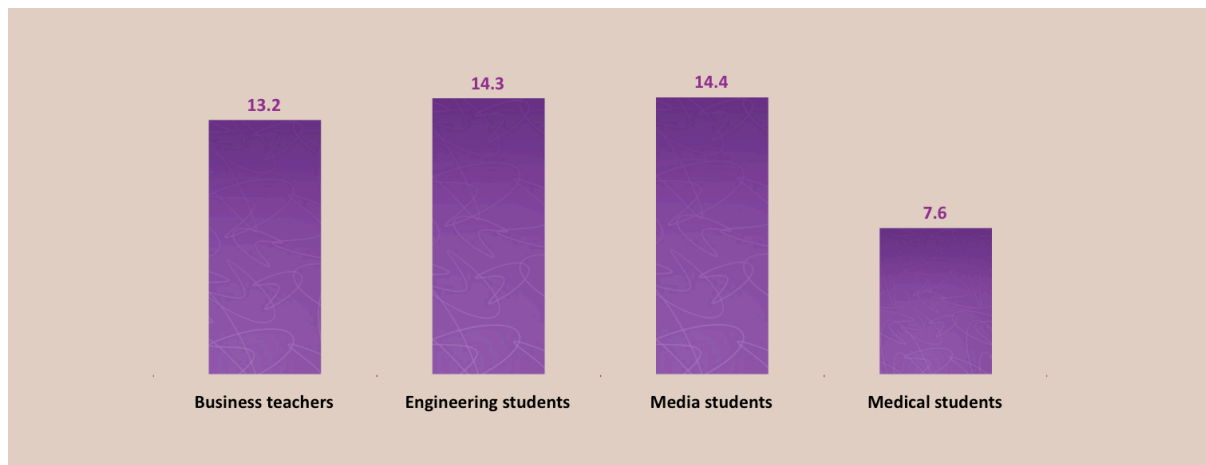


Fig.26 shows the take-up of JISC e-books within the respective student cohorts. The levels of penetration should be interpreted against the background of a small number of titles – only 36 overall.

Figure 27: Use of JISC Collection project titles: JISC discipline students

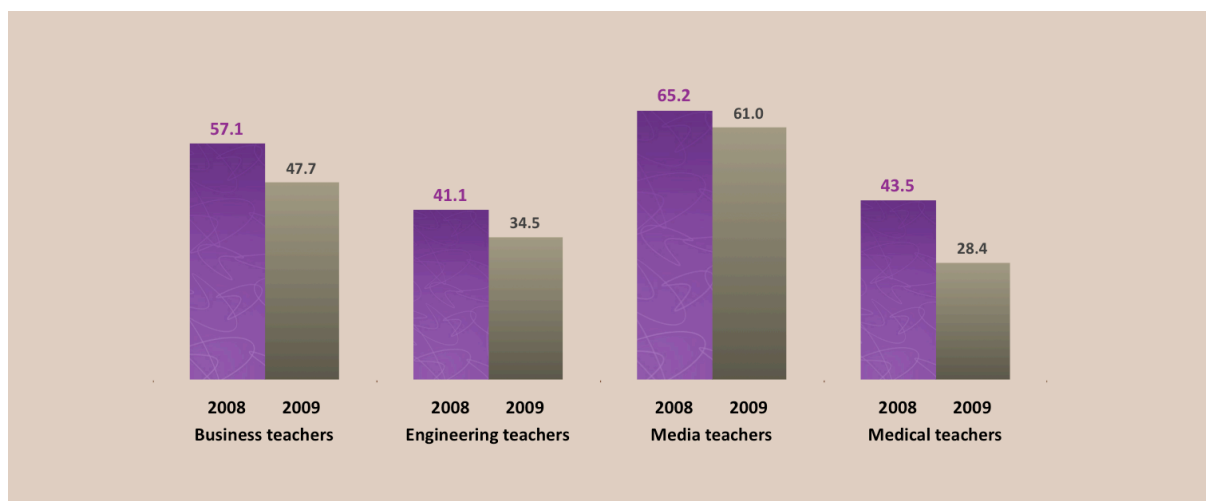
Have you used any of the JISC Collection project titles in their electronic form? Percentages answering 'yes' (n=13,219)



Of course, we have no meaningful benchmark here since few universities offered electronic access to these titles at the beginning of the project, but these figures look encouraging in that they are roughly in line with a question in the 2008 survey that asked how many students had borrowed a library print copy. This suggests little user resistance to e-books, they have made the switch very quickly.

Figure 28: Level of student complaints (entry and exit surveys compared)

Do your students regularly report back any problems concerning library provision of textbooks? Percentages answering 'yes' (n=1,428)



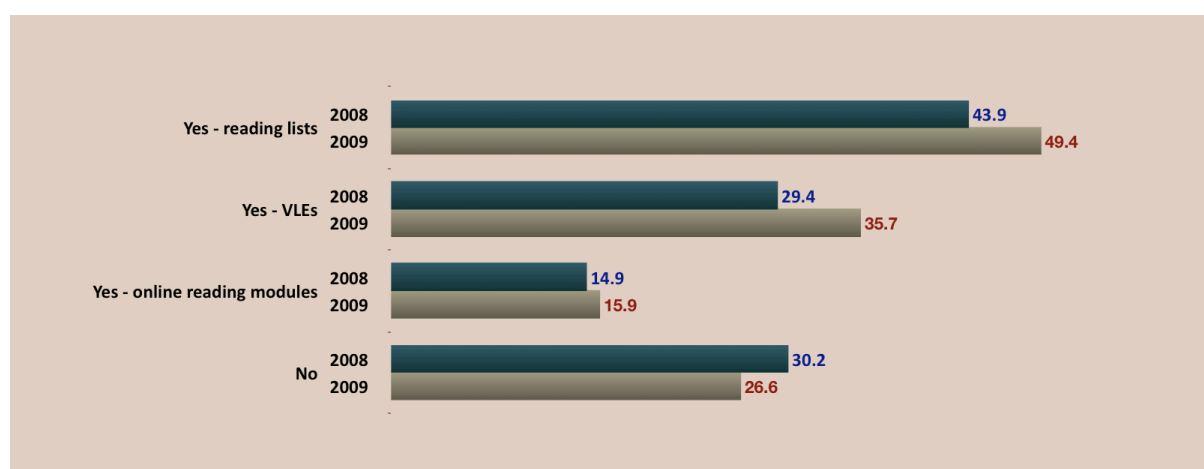
In an earlier slide, we looked at student-reported levels of satisfaction with library textbook provision. Fig. 26 and Table 7 confirms the storyline, this time from the mouths of the frontline academics who teach them.

Table 7: Level of student complaints (entry and exit surveys compared)
Do your students regularly report back any problems concerning library provision of textbooks?
Percentages saying 'yes' and index (2008=100)

<i>Those indicating yes</i>	2008	2009	Index
Business teachers	57.1%	47.7%	83.5
Engineering teachers	41.1%	34.5%	83.9
Media studies teachers	65.2%	61.0%	93.6
Medical teachers	43.5%	28.4%	65.3

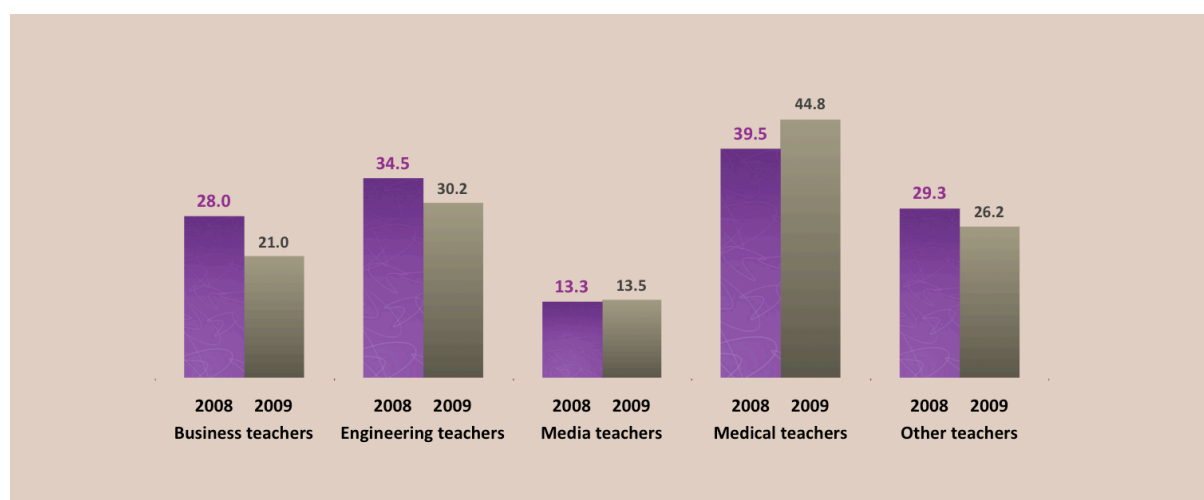
Mirroring the earlier question, here is further evidence of a strong upswing in student satisfaction with library provision of textbooks, this time as reported by university teachers.

Figure 29: E-book recommendations: all staff (entry and exit surveys compared)
Do you actively encourage your students to use e-book materials? Percentages (n=939)



Between 2008 and 2009, there has been a significant shift in terms of teaching faculty who actively recommend e-books to their students. The extent to which this effect is specifically due to the promotion and publicity associated with the Observatory project, or simply a rising tide of general interest in e-books is unclear.

Figure 30: Teacher recommendations (entry and exit surveys compared)
Do you recommend or actively encourage your students to use e-book materials? Percentages answering 'no' (n=3,899)



One of the consequences of the Observatory project was that much effort went into raising awareness of e-books generally, and the JISC e-books in particular.

This appears to have been particularly successful in relation to a key target audience: faculty who teach in the disciplines that JISC Collections licensed e-books in. With the exception of medicine, (pun intended) the medicine seems to have worked. Levels of interest in e-books among university teachers is very much higher than at the point the project started (Table 8).

Table 8: Teacher recommendations (entry and exit surveys compared)
Do you recommend or actively encourage your students to use e-book materials? Percentages answering 'no' index (2008=100)

<i>Those indicating no</i>	2008	2009	Index
Business teachers	28.0%	21.0%	75.0
Engineering teachers	34.5%	30.2%	87.5
Media studies teachers	13.3%	13.5%	101.5
Medical teachers	39.5%	44.8%	113.4
All other teachers	29.3%	26.2%	89.4

The proportion of university teachers that do not recommend or actively encourage their students to use e-book resources seems to be falling away rapidly in many subjects. For those teachers outside of the subject scope of this experiment, the figure has declined by just over ten per cent in one year. This suggests that e-books are rapidly becoming embedded in academic practice. Interestingly, media studies and medicine are bucking the trend.