



BOURNEMOUTH UNIVERSITY
The impact of e-resources:
results and key messages from
a cross-School study 2004/06

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Executive Summary

Bournemouth University (BU) Library participated in Phase II of the LIRG/SCONUL Impact Implementation Initiative in 2004/5. The chosen theme was an assessment of the impact of e-resources, using the Institute of Health and Community Studies (IHCS) as the focus of an action research study. Action research was chosen as the methodology because it is participatory; encouraging the researchers to seek and consider the views of others and encourages the triangulation of multiple data sources enabling the research to obtain diverse views. This enables reflection on practice and encourages those doing the research to make adjustments as a result.

“Action research is a multi-disciplinary, experimental research method that relates knowledge to practice. It involves collaborative partnerships and is participative and grounded with practical concerns” (Reason & Bradbury 2001).

During 2006 the study was repeated at BU, focussing on two other academic Schools; the School of Conservation Sciences (CS) and the School of Design, Engineering and Computing (DEC). Triangulation allows the views of academics and students to be considered alongside data from management information systems

Responses received revealed both a widespread endorsement among staff and students of the principles of e-resource provision and its usefulness, particularly off-campus. Synoptic responses reveal the enthusiasm for e-resources, evidenced by requests for increases in the resources, particularly back runs of journals.

The findings of the IHCS survey in 2005 have been supported by the results from CS and DEC surveyed in 2006. The evidence is that the marked upward trend in usage continues and from these results a number of conclusions can be drawn which have implications for e-resource procurement, library skills teaching, and collaboration with academic staff.

1. The study

1.1 Phase One of the study

At a two-day Impact Implementation Seminar in July 2004, participants were encouraged to set measurable objectives for their chosen impact theme, identify success criteria, specify the evidence required to assess whether those criteria have been met, and to work out what impact measures they would use. BU and the University of the West of England (UWE) agreed to collaborate in assessing the impact of e-resources on their respective institutions. Following an interim review in November 2004, the final review took place in December 2005.

Online questionnaires targeting both students and academic staff were advertised by email and on the intranet of IHCS. These included both factual and behavioural questions concerning use of e-resources, and in each case ran for approximately one month. Follow-up interviews were then sought with staff and students, in which further questions were asked to clarify attitudes toward, and use of, electronic library resources. The quantitative data gathered supported the evidence of qualitative impact; the results showed consistent endorsement for the shift to electronic resources from both staff and students. Results from UWE were broadly similar, thus adding to the importance of the BU response.

What's a library? It's so long ago that I walked into the library to look at a hard copy and I'm only next door. Print access is for people who haven't worked out how to access resources online." (IHCS staff 2005)

1.2 Phase Two of the study

Following the format of the 2004-5 study, the second phase in 2006 surveyed CS and DEC, using the same format of online questionnaires to staff and students, followed by interviews with staff. Enthusiasm for electronic resources was widespread amongst staff and students, with many respondents asking for increases in e-resources, especially back runs. As with the 2004-5 study the results from quantitative measures of usage supported the findings. This report highlights some of the results of the survey.

We need to improve our stock of past issues; in many cases using ScienceDirect we do not have the historic runs which are available electronically but we do have subscription; we need to invest in this urgently to improve our e-journal resource. They are truly fantastic resources which we need to maintain and invest in (CS staff 2006)

2 Results and outcomes

2.1 Quantitative data

Usage data of online resources is an objective measure which complements qualitative data gathered from the users themselves. There are different ways in which this data can be gathered, e.g. through Athens log-ins, full-text downloads, links out from link-resolvers and e-book accesses. As this data has been collected consistently over a period of time, when linked to the value and importance evidenced in the quantitative feedback, it is possible to use this data to measure evidence of impact.

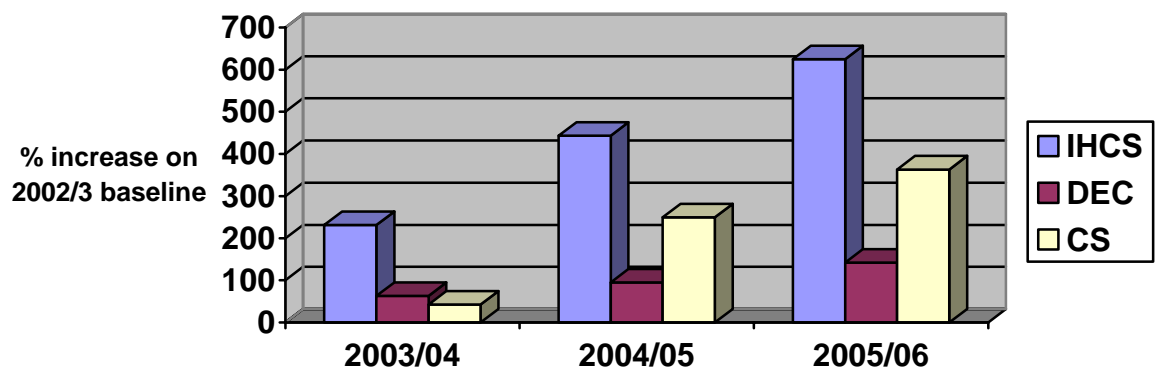
2.1.1 E-resource usage trends

- Use of all e-resources continues to increase year-on-year
- Big and/or rapid increases are associated with new resources (e.g. NetLibrary and Ebrary e-books)
- Smaller increases are associated with established resources (e.g. full-text downloads)

2.1.2 Outcomes

The Library's heavy investment in e-resources is endorsed by their sharply increasing uptake. Future trends will be monitored by continuing to analyse the management information available and this will be extended whenever possible.

Athens logins by year and School



2.2 Qualitative feedback

The importance of this report is that the qualitative evidence about value and impact are used to support the quantitative data. The same questions were asked in 2004-5 of IHCS and 2005-6 for DEC and CS. It can be seen that both the quantitative and qualitative feedback, in the responses reported on below, illustrates the growth in use of e-resources.

Two significant highlights are:

- At least two-thirds of students claimed to be using e-resources more this year than last: 66% (IHCS), 70% (DEC), 76% (CS). This excludes first-year students, to whom this question is of course inapplicable. This is even more striking given that 3rd and 4th year students were not surveyed by DEC and CS.
- Over half the staff respondents claimed to be using e-resources more this year than last: 53% (DEC), 66% (IHCS), 75% (CS).

2.2.1 Responses to individual questions - students

Survey Question no.7

From where did you access your most recently used resource?

Between half and three-quarters of student respondents accessed their most recently used e-resource from home: 50% (DEC), 67% (CS), 72% (IHCS).

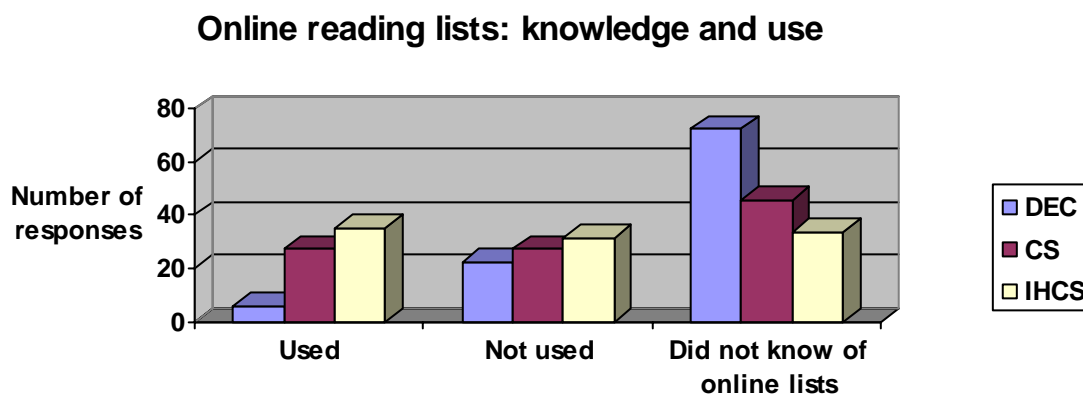
2.2.1.1 Outcomes

- Commitment to investment in extensive off-campus e-resource authentication is justified.
- Future service planning will continue to take account of remote/domestic access. Help facilities will be devised with this in mind.

Survey Question no.8

Have you used the online reading lists to access e-resources?

A recent development within Bournemouth University's portfolio of e-resources has been the inclusion of course reading lists on our web site. IHCS took the step of linking when they could to their learning environment and this led to over 70% knowing about the lists and 35% using the lists. This contrasts with the experience of DEC and CS where reading lists were not linked to their VLEs.



2.2.1.2 Outcomes

- Responses to this question identified the need to further promote this service. This has been done by the inclusion of the reading lists in all unit level access in the universal VLE (myBU) being implemented in 2006-07.
- The embedding in myBU should enable more effective updating and relevance of the reading list as a concept affecting the impact of learning resources on the student experience.
- In the impact study for 2006-7 further work should focus on the role of the reading list as a route to all learning resources whatever their format.

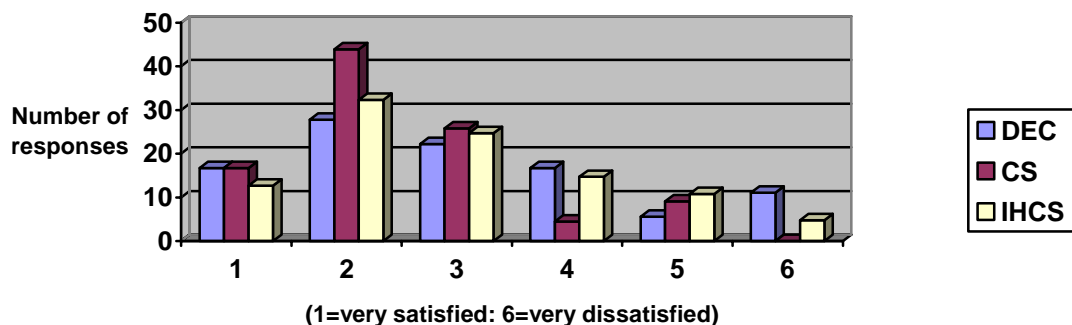
Survey Question no.9

How easy did you find your most recently used resource to access?

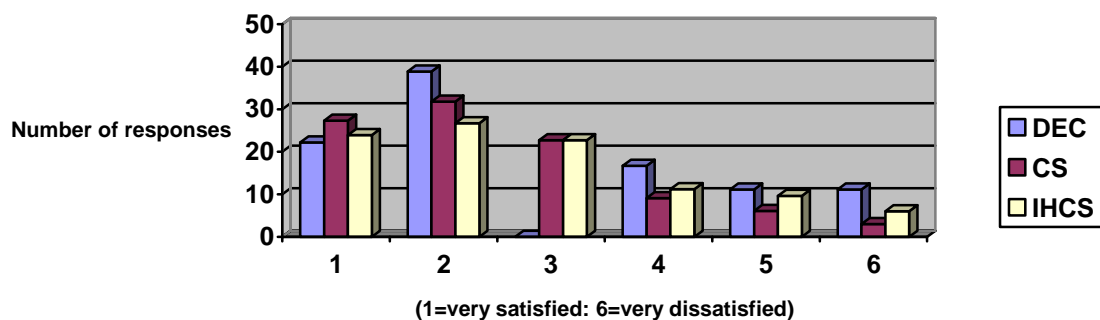
The five graphs below depict satisfaction ratings from 1 (very satisfied) to 6 (very dissatisfied) for each of the aspects of library e-resources. All five graphs share a broadly similar overall shape. (Satisfaction with *range* of resources obviously brings out the greatest differences between the Schools). In every case there is a peak at 2 on the Likert scale.

Qualitative comments help us understand what some of these scores meant to individual respondents.

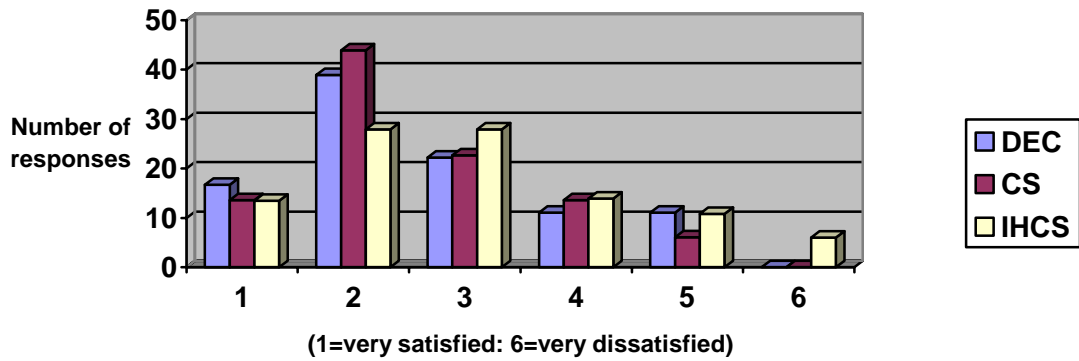
Relevance



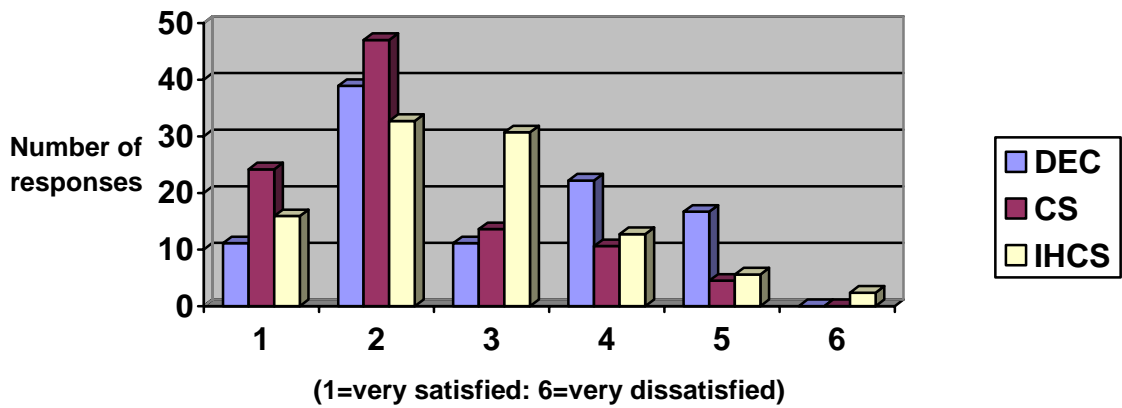
Ease of access



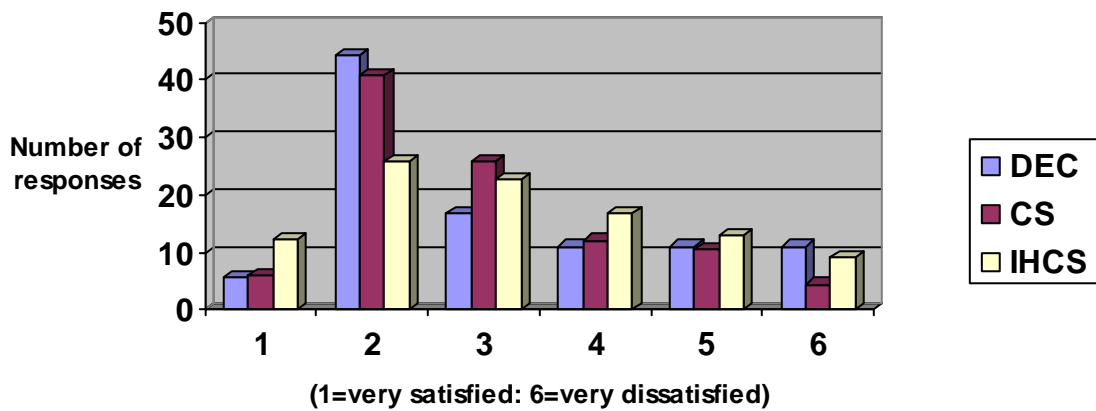
Ease of use



Range of resources



Confidence in use



Of 127 free-text responses from students, nearly all could easily be grouped under three broad headings:

- praise and approval of the existence of e-resources and/or the ability to access them remotely;
- some dissatisfaction with current access and/or searching capability of e-resources;
- requests for greater full-text access to journal articles.

2.2.1.3 Outcomes

- The opportunity given to the staff and students to articulate what would make e-access even better has given a useful insight into the ongoing training and development needs of both groups.

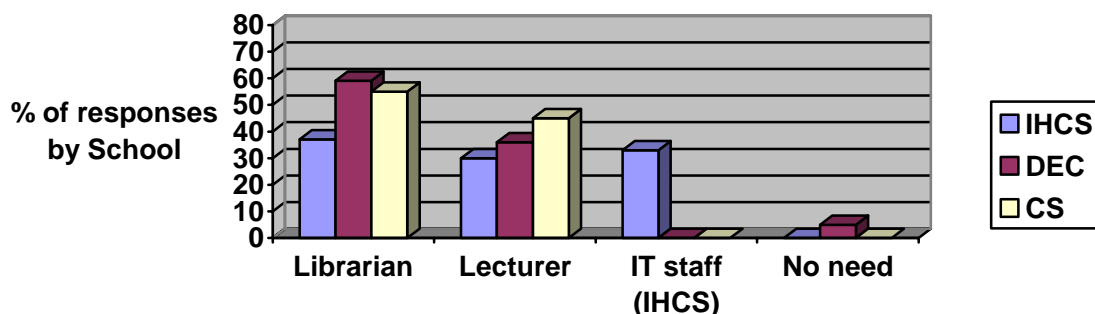
Summary of student responses

Impact has reached the point where:

- students recognise the importance of electronic resources to their learning experience;
- they recognise the need to develop skills to exploit them more fully;
- being able to retrieve full-text articles to the desktop is highly valued and expected, rather than exceptional;
- electronic resources are having a positive impact;
- the impact study has enabled the respondents to express their satisfaction and their aspirations for improvements and several responses included both, along the lines of 'once I found the information it was very useful'.
- library staff need to ensure that training sessions address issues of clarity and simplicity;
- whenever possible feedback should be given to third party providers to simplify their access;
- wherever possible links to resources should be integrated into the VLE.

2.2.2 Responses to individual questions - staff

Survey question 15: Who should introduce students to e-resources?



The survey showed the importance of the academic process in exploiting the best of the e-resources whilst also recognising the role that librarians play with their knowledge of quality resources and their work in information literacy.

2.2.2.1 Outcomes

- Students must be actively introduced to quality e-resources and taught how best to use them
 - Library and academic staff must work together to ensure that both the range of e-resources, and best practice in using them, are fully shared
- Only 1 respondent out of all three Schools believed there was no need to introduce students to e-resources.

Survey Question no.17

How, in your opinion, might e-resources be better integrated into the curriculum?

The extensive free-text comments suggested four main themes:

1. academic staff should be aware of and confident with e-resources and use them as an integral part of the teaching process;
2. designing assignments to require use of e-resource skills;
3. all teaching rooms should have functioning internet access to enable demonstration of e-resources;
4. students should receive an initial introduction to e-resources, which is then continually reinforced by academic staff in the teaching environment and/or library staff in targeted skills sessions.

myBU enables a transformation in ease of access to relevant resources in curriculum integration of e-resources, and this is being actively pursued (August 2006) by:

- integrating reading lists, which include both print and electronic, including a simple mechanism for keeping them up to date;
- giving access to information literacy tools to enhance the search for quality information;
- developing an electronic reserve collection of high demand journal articles and book chapters, scanned using the CLA licence and integrated within the relevant units

Interview Question

Would you say Library e-resources are essential or marginal to your work and your students learning?

All staff questioned recognised e-resources as essential and valuable. This in itself is evidence of their impact, since only a few years ago they would have been seen merely as *complementary* to print resources.

The biggest opportunity in a long time. Now a small-sized University can compete with the best. (CS staff 2006)

I expect the students to use the electronic resources extensively in their research so in that respect they are essential. (DEC staff 2006)

E-resources have increased my functionality. They have added value to my role as an academic and made me a better teacher and researcher. (IHCS staff 2005)

Interview Question

How do you feel about an increasing proportion of the School library budget being spent on e-resources?

Whilst staff were positive about this, recognising the benefits of e, they also acknowledged the continuing importance of print resources, particularly in the following key areas:

- unique print-only material, for example classic/landmark texts;
- staff expressed opinion and personal belief that:
 - serendipity and 'reading around' a topic is easier and more convenient with print;
 - the printed book is easier to handle and access.

Very positive. (CS staff 2006)

2.2.2.2 Outcomes

- E-resources should be considered as part of a continuum of resource provision,
- The advantages of e-resources should be shared and optimised and the weaknesses recognised and minimised.
- The 2006-7 impact project should look at the changing role of print learning resources for BU staff and students.

2.3.1 Triangulation of survey responses with Student Satisfaction Survey

The Student Satisfaction Survey has been conducted annually on select student populations by Academic Services on behalf of the University. The following results obtained from the 2004/05 Survey support and reflect the high levels of apparent satisfaction with e-resource provision revealed by the Impact study:

Satisfaction with e-resources in your subject area

Total response 43.7% rated high satisfaction (levels 1 and 2)

Satisfaction with info on library web site

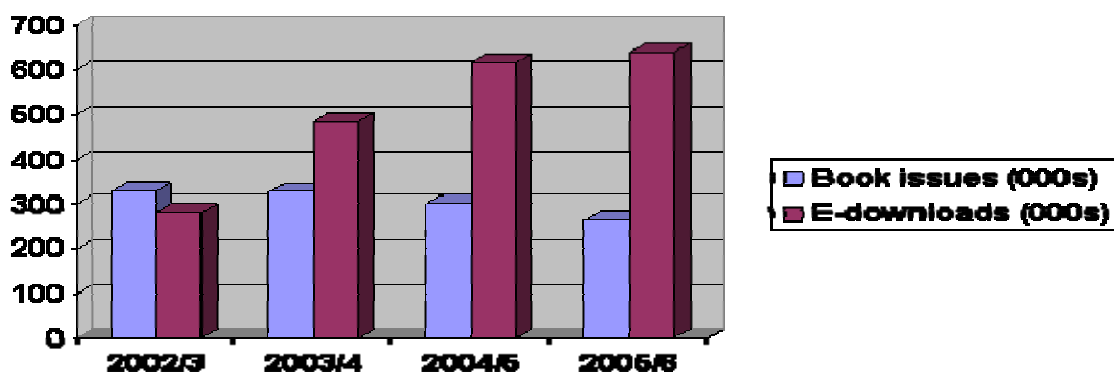
Total response 36.8% rated high satisfaction (levels 1 and 2)

Satisfaction with access from off campus

Total response 35.3% rated high satisfaction (levels 1 and 2)

2.3.2 Triangulation of survey responses with trends in print usage

Increase in e-resource usage is matched by a decline in loans of print books.



2.4 Full results of the study, including full project description

The above can only give a brief snapshot of the most important conclusions to be drawn from this second year of our action research e-impact project. It has thrown up a rich wealth of data.

- The full staff and student questionnaires used by all three Schools, together with all the free-text responses, can be viewed on the *Bristol Online Surveys* server at <http://www.survey.bris.ac.uk>. This is password-controlled: please contact one of the relevant Subject Librarians for access
- The full Final Report (Dec 2005) of the IHCS pilot to the *LIRG/SCONUL Impact Initiative*, including details of the action research methodologies employed, can be found on the LIS-IMPACT filestore. Go to: <http://www.jiscmail.ac.uk/lists/lis-impact.html>, click 'Files Area' and select Bournemouth.
- For details of the staff interview questions and the transcribed or summarised responses, contact the relevant Subject Librarian.

3. Conclusions

Action research is an appropriate methodology for this type of research, as it allows quantitative and qualitative data to be used and learning to occur through action and reflection. Triangulation enables different views to be considered, allowing the views of a diverse community of academics and students to be considered alongside data from management information systems. The impact of electronic resources on the higher education community is already considerable and new ways of learning and teaching are likely to maintain the momentum for the foreseeable future. The role of print is still important but changing, and this needs to be the target of next years survey.

4. References

REASON, P. BRADBURY, H. eds , 2001. *Handbook of action research*. London. Sage