

INFORMS: the Information skills project

Oxford University Library's report

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Informs project at Oxford University

Overview

The Informs project at Oxford was conducted in three different areas – English, Social Sciences and Medical Sciences. The work was done in conjunction primarily with library staff in these subject-specific libraries. Due to the nature of tutorial teaching a lot of induction training to online resources is conducted by librarians rather than by academic staff as at other institutions. In addition there is a section of the central library (SERS – Systems and Electronic Resources Service) which provides integrated support and systems for a wide range of IT-related services and activities across the library sector and had input to the design and construct of the project.

A series of questionnaires were conducted to establish the baseline competencies of staff, librarians together with students in the different areas. At a similar time a centrally-supported VLE system was introduced in pilot phase by the Computing Services. Thus there is no established usage of VLEs at Oxford prior to this study and often no awareness of the concept. Most when asked about where in a VLE the Informs resource should reside provided answers relevant to their awareness of the effectiveness of their various libraries. The WebLearn VLE is based on the Leeds-created Bodington system which is an open source software release. One of the driving factors in choice of this software for the pilot was that all pages of information are accessible via a straightforward URL.

WebLearn allowed the Informs material to be accessed through the VLE in a variety of ways – we created links through a new browser window, and directly through from an http link. Additionally we tried using a set of headings to give more detailed information before clicking through. This variety of ways seems to be borne out by the questionnaires with their great depth on where resources should be positioned and how much information there should be to describe the resources. Asking staff where the resources should reside the librarians want the resources in the libraries area, subject specialists want them in their area, while additionally students have come up with the concept of a training area. The functionality of WebLearn allows all these approaches to be allowed, but it seems most likely that the resources will be maintained by the librarians.

Medical Sciences

Medical Sciences organised a number of days for training on the Informs material – unfortunately two of them clashed with equipment failure with the Janet backbone connection thereby making direct connection from the Oxford network infeasible. To utilise the students who did attend the optional sessions links were made using NHS computers across to the resources at Huddersfield, but on a slow connection (equivalent to dial up) which probably explains some of the comments about speed of response. Speed was also an issue as the number of units and associated users grew, which has been alleviated by the new version running in Perl on a new server.

Medical librarians created one unit with 19 sections, Searching for Summaries for Evidence. The main aim of the unit was to make medical students aware of three free online resources that were considered relevant and reliable. Most of the students who came to test the unit said they hadn't used ANY of these 3 resources before, and felt that they had learned something new. These are born out by the figures from the before and after surveys.

The librarians felt it was useful to make the students aware of resources they could access from outside the Oxford University network, as they had already received information regarding OxLIP resources. OxLIP (Oxford Libraries Information Platform) is an interface providing access to several hundred subscriptions to bibliographic, reference and full-text databases. For licensing reasons, they are only available to members of Oxford University. Most students, from experience, seemed particularly au fait with the Web of Science so it was not felt appropriate to duplicate effort on training for this resource.

Will the unit make significant changes in the present culture of learning at the Cairns Library (the library based at the University Hospital)? Currently medical students come in for a compulsory session on strategy-formation at the beginning of their time at the hospital. They are not usually seen again in a teaching/learning context, although one or two make their way into subsequent "regular" sessions that the library provides for all readers. Students could be encouraged to look at the unit during or after future induction sessions. It may be a valuable follow-up/reiteration tool allowing for later refreshment or expansion of skills..

Questionnaire summary – Medical Sciences

Prior to using the resources many medical students stated they went to the internet first as it was an easy way to get up-to-date information which is truly up-to-date and much quicker than and with a wider scope than doing a book search. Books were regarded as giving a good overview and providing information in a condensed manner with no rubbish included. The overwhelming comment is that too much information is returned from Internet searching so that there are problems sorting out what is relevant both in terms of search technique and level of peer review.

Users are frustrated that often only abstracts are available, but not full papers or that the full paper could not be accessed for some reason (subscription etc) Often only the most recent papers are available, and trend-setting papers from 10 or more years ago are not available.

Using the internet is easy, can be used from a bedroom or home without the need for a trip to the library, it has a wide scope and can provide links to related information which is current. An added bonus is that images can be incorporated into submitted work (we didn't go into copyright issues on the survey).

Prior to using Informs the users perceptions of a web-based training package was that it should be simple to use, fast, have a variety of levels for searching tied in with a modular design so the user can determine what is relevant. Additionally all this should be in a package which is not over-long. Looking at the post use responses it seems Informs met most of these aspirations.

Quantitative data shows that the Internet Searching skills level increased after usage of Informs material so that 30% extra thought they were good and there were now no more beginners. The overall rating of the Informs material was 37% Excellent, 60% Good and no negative responses. 97% thought the contents were at the right level with only 3% thinking it too elementary.

Qualitatively the resource was simple, easy to use, clear, showed new sites they were previously unaware of, and particularly relevant with hints on which databases to use for which purpose. The Social Sciences responses showed a request for this sort of hints.

Many students are wary of being spoon-fed information (or in a number of cases expressed resentment at being obliged to attend search skill training) The Medical students had a 33% increase in the use of Online Tutorials after using Informs which shows a barrier to be overcome in selling this type of training.

There was a phenomenal increase in the use of the various databases after Informs training compared to before – NeLH increased to 90% (46% increase), Clinical Evidence increased to 97% (56% increase) and TRIP to 94% (a staggering 90% increase showing previous student ignorance)

Most thought the material was inviting to use with 90% giving a score of 4 or 5, however there was a fairly even spread as to the speed of reaction which probably reflects the problems with the access links, and the fact that this was prior to the software upgrade. 93% found relevant material (score of 4 or 5), while 87% were able to find specific information, 83% saved searching time and 83% thought it helped them to evaluate sites.

Looking at the experience of using Informs, the overwhelming majority enjoyed using the material, thought the materials made searching easier and would recommend to other students. In all these questions there were no scores below 3 out of 5. One person felt his gain of new search skills was low and they probably wouldn't use Informs again, against 87% to 90% who gave excellent or good scores. The one questions which divided students was whether material should be provided all in one session where there was a spread from 1 to 5, giving 43% preferring less matter compared to 27% preferring all together. Interestingly English did split their training into smaller units, and they had 5% less voting for it all in one session.

There was some request for the training to be modular, to be adaptive (so it could react to the user's searching) and that the training material could be split out of the frame, which is now feasible. The comment "put a page of relevant websites that you can print out and keep" certainly reflects the power of accessing this material through a VLE.

Where is the student most likely to look for these resources – given the lack of awareness initially of the VLE – the Department al site came out 20% ahead of Library web pages. Tutor's site is thought to be unlikely to be a starting point, while there was an even spread for OxLip. Qualitative data suggested "a simple and easy to remember URL" for the training material – an ideal use for a VLE

Social Sciences

Social Sciences provided 2 modules: Citation searching for Social Scientists and Subject searching for Applied Social Scientists. These are the CSA sociology/social work databases. Citation searching for Social Scientists will have to be updated this when web of science 5/web of knowledge goes live – a perennial problem with a lot of databases in that they change their structure or feel.

One librarian wrote the modules and another librarian tested and commented upon them.

There has been no cultural change within Social Sciences due to these modules. Currently the awareness of the VLE is low (it was launched in Pilot phase around the time the surveys were conducted). The module authors feel the best thing to do would be to link to these online tutorials from OxLIP to enable independent learning at the point of need.

Links from VLE or Social Science Library Web pages are thought to be likely to be less effective. The Informs tutorials would not be used in the online resources courses but might be given as a reference to the URL if students want to follow them up afterwards.

Questionnaire summary – Social Sciences

Prior to using the Informs material the Social Science students were evenly split over whether they went to the Internet first. Some were aware of the internet, used Google and OLIS along with electronic journals because they were fast and easy. Others felt that they were overwhelmed by the amount of information, they used reading lists which were predominantly aimed at paper resources and that books were more relevant while the internet was too general. Other problems are that it is difficult to establish what is reliable, relevant, or of a sufficient age. Generally there was too much stuff. However there were lots of good reasons for using the internet - the qualitative amount for was double the amount against –which included it was quick, easy, fast, wide-ranging, up-to-date, gave contrasting views, provided links to material and was easier than chasing books. The resources are available, can be accessed from their own room with no need to go to the library.

Respondents would use a web-based package if it was written in plain English, was not too basic (or alternatively could adapt to the level of the user), was subject-specific and provided access to authenticated, trusted, quality resources. A number wanted the possibility of falling back to asking questions of a human being. A number seemed very confident (or complacent) about their searching ability and seemed reluctant to spend time learning as they felt they were sufficiently advanced. A great comment bearing out one perception was “it sounds boring”. Interestingly 84% thought their internet searching skills had improved after using the tutorials although figures showed that only 3% had promoted themselves from Good to Advanced while the rest remained the same.

The Informs material received a rating of 85% for Good or Excellent, 88% thought the contents about right, 88% thought it of some help which produced a marginal increase in use of the Internet compared to the library for research. There was a 45% increase in use of Bibliographic Databases and 53% increase in use of Online Tutorials after the Informs sessions, with commensurate increase in recognition of Web of Science (up 30%).

Many gained new searching skills (78% gave 4 or 5 as their rating) while there was a feeling that all material should be covered in one session, it was not as strong as with the medical students

English

The English Faculty produced the following Informs tutorials for testing in spring 2003:

1. Introduction to the MLA
2. Introduction to LION
3. Searching LION for literary criticism
4. Accessing full-text works on LION

Since the trials, we have produced an additional tutorial for our students:

5. Introduction to TDnet – electronic journals

The material was produced jointly by a librarian and a computer support officer.

The Law Department became aware of the resources and were producing some material of their own outside the scope of this report.

The trial sessions seemed to go very well and most students gave positive feedback about the tutorials. Many had never used the example databases before (MLA and LION) so it was a good opportunity to talk to students generally about using electronic resources for their study. Indeed, getting students to actually use the databases and raising their awareness of other databases available in Oxford, was one of the main successes of the Informs project for the English Faculty Library.

The units themselves are unlikely to have made a significant impact on the culture of learning within the faculty at this early stage; however online tutorials are going to form a significant part of the English Faculty information skills training programme in the future. The aim is to write a tutorial for all the key databases that English students use and then promote these in both English Faculty induction sessions for first years and extended essay sessions for second years. The Reader Services Librarian (James Hodgkin) will now take over responsibility for developing online tutorials and this will become part of the job description for the post in the future.

The expansion of Weblearn will hopefully encourage more students to use our online tutorials. The ideal scenario would be for tutors to include a link to the library tutorials as part of their online weekly lecture/reading list. If students were studying Dickens, for example, the tutor would direct them to the MLA database to search for relevant journal articles or indeed LION to read the online full-text version of his works. Links to the tutorials would be there for those who had never before used the databases. Tutors and library staff will need to liaise closely to achieve this, but such co-operation should improve the profile of the library and encourage more students to use the wide range of electronic databases available to them – particularly if their tutors are encouraging them to do so. This will require an overall change in the learning culture of the faculty, but a few tutors are already making use of Weblearn and hopefully more will follow as the VLE is further developed.

The initial results from the project do point to some specific areas that English Faculty Library staff need to think about. General awareness of key databases (including MLA, LION, TDnet, EEBO) was disappointingly low and we do need to raise the profile of these electronic resources to students. Information gained from induction sessions is only used by 8.3% of students which suggests that we need to think about changing the format of induction. As most students study in their college room, we need to ensure that they have access to as much online help as possible – which is where the Informs tutorials will have an important role to play.

General searching skills seem to be quite poor – 70.8% of students “dive straight in” to a search and only 36.2% create a list of keywords to help them with their subject searching. Information retrieval and evaluation are important transferable skills that all students should have acquired by the time they leave university; however current library induction programmes in the faculty do not seem to be very effective in teaching students how to find, evaluate and use academic information effectively. Again this is an area where academics and librarians will have to liaise more closely to make information skills an essential component of all undergraduate degrees in the faculty.

With regards to the Internet, the majority of students (93%) use the Internet for their studies but only 16% always find what they want. 66% acknowledged that they had specific problems when using the Internet but only 10 students stated that it might be due to keyword/search term problems (which is in fact one of the major reasons why many searches fail). It would therefore seem vital that we run extra training sessions on using the Internet properly for academic research e.g. think about appropriate search terms and use advanced search screens, subject gateways etc. The majority of English students had never heard of HUMBUL and this is something that does need to be addressed urgently.

Questionnaire summary – English

The English students wrote significantly more than the other subject students in their qualitative sections, and seem much more prone to using books rather than using on-line resources. This is partly due to the nature of the subject matter. Books are perceived as more use than the Internet as the information can be trusted, are more accessible and require less technology, are easier to read for a long time and are more reliable. Reading lists are based more around books than links to

resources, but the internet allows for different points of view and give a broader context so providing good ideas for further research or reading. It is possible to cut and paste data from the internet – particularly statistics – into essays. Information can be found on the Internet first and then get the book or article form the library for reading. It was also pointed out that books can be ordered online, saving a lot of walking about.

There were repeated problems during the training period with exceeding the number of allowed users on LION. Users liked the fact that Informs was clear, specific, easy to follow, straight forward precise, brief and interactive (this later more probably applies to the database than the training material). Many asked for more guides to similar resources, and requested a page to describe the resources and their relevance. This is the ideal page within a VLE to launch the material from.

Many students echoed the librarians comments regarding lack of awareness – “I am a 3rd year student..any attempt to forcibly introduce 1st years to the resources would be valuable” was echoed a number of times.

The figures for English students reflect similar trends to the other two sets. However whether the material should cover all of the dataset in one session there was a significant preference for shorter sessions (48% to 31%) which is contrary to the other subjects.

Conclusions

The differences between the subject groups was no surprise e.g. medical students are more familiar with ejournals compared to English - but this is a result of more material being available.

With regarding to linking to and within the VLEs the consistent message that is coming over from all groups is the overwhelming nature of information available. So the targeting and location of the information is essential.

Not surprisingly the post testing surveys established that the users want the information at the point of need, so from the libraries perspective WebLearn will allow the repositioning of already available material to link the electronic resource to the support material associated with it (not only Informs modules). This is a major strength of using a VLE to provide resources, and one of the major reasons for the choice of VLE made at Oxford University. Bodington, which powers WebLearn, allows for direct linking from outside. and in depth links across levels without the need for repetitive clicking through stages.

The responses given by the Librarians in the baseline survey bears out the danger that they themselves are under from being overwhelmed and not being able to keep up to date with new subject matter.

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