

User Education in The Hybrid Library – Double Trouble?

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Introduction

The title of this paper is a question - "User Education In the Hybrid Library - double trouble?" And in this paper we have detailed how we are trying to avoid the answer to this question being a "yes". Although we are a college of Higher Education we are sure that the challenges we face apply to the whole medical/pharmaceutical library world and beyond.

Outline

Here is an outline of what we'll be discussing:

- 1.Introduction to the School of Pharmacy and its Library.
- 2.What is the Hybrid Library?
- 3.Why Hybrid and not Electronic in the Foreseeable Future?
- 4.Other Barriers to the Electronic / Hybrid Library.
- 5.The Advantages.
- 6.The School of Pharmacy - a Hybrid Library?
- 7.Our Hybrid Aims.
- 8.How have we tried to achieve our Aims in 2001/2002.
- 9.Problems achieving our Aims.
10. Conclusion.

Introduction to The School of Pharmacy and It's Library

The School of Pharmacy is an independent biomedical college of the University of London. The University of London is a federation of colleges, so The School is really a University in it's own right. We train pharmacists at undergraduate and postgraduate level and are, in fact, the oldest School of Pharmacy in the UK. But the college also undertakes research at the highest level. As a result of our teaching and research we have links with the NHS, pharmaceutical industry and medical charities.

The Library caters for just over 1,000 registered users and is part of a converged Information Service headed by the Chief Librarian.

What is the Hybrid Library?

The term, 'Hybrid Library' is something I am sure we have all heard of in the last five years or so. Charles Oppenheim and David Smithson (Oppenheim and Smithson, 1999) pointed out that the earliest use of the term was made by S. Sutton in 1996 (Sutton, 1996) and the term then found a wider audience in the UK with the work of Chris Rusbridge and the eLib Programme (<http://www.ukoln.ac.uk/services/elib/>).

The main aim of the eLib Programme, the Electronic Libraries Programme, "has been to engage the Higher Education Community in developing and shaping the implementation of the electronic library" (Brophy, 1999)

and they have funded many projects. For those of you not familiar with this UK organisation it is really worth having a look at their web site and the five eLib Hybrid Library Projects. The Hybrid Library of the Future project, known as HyLiFe, has produced what they have called a toolkit (<http://hylife.unn.ac.uk/toolkit>) which we think is a brilliant introduction to the concept and is full of practical advice on implementation.

Of course there have been many forays world-wide into the digital library. There has been the US Digital Libraries Initiative, the European Telematics Programme and Germany's Virtual Library in Medicine.

So, what do we mean by the hybrid library? Well, commentators seem to agree that it is where traditional resources and electronic resources are brought together to work in an integrated way. Digital and electronic are often used as synonyms and for the purposes of this paper we haven't made a distinction unless there is a specific reason to do so. The ultimate aim of the Hybrid Library is to give the user seamless access to the most appropriate resource whatever the medium, whether it's print, sound, digital, etc.. Advances in web technology have made it more of a possibility that we will be able to provide users with a single interface to explore all resources.

Where commentators do not seem to agree is where the hybrid library is on the evolutionary scale. Ann Lees described it as the "stage after the digital library" (Oppenheim and Smithson, 1999) - the reasoning being that we already have digital libraries, but we keep them apart from traditional sources. Others see it as a half way house to the digital library and then there are those that see the hybrid library as the provision of the future. Personally, at the moment, we lean towards the final opinion.

Why Hybrid and not Digital in the Foreseeable Future?

Well, I think we can illustrate this just by looking at e-journals. In 2001, at The School of Pharmacy we undertook a literature review and a little study to determine the medium, electronic or print, for our journal collection and we devised a presentation for all staff at the College to explain the issues. We were keen not just to involve the academic staff, but also the technical staff who run and teach in the labs, and the administrative staff who run the Finance Department. And here is some of what we discussed;

1. Print Investment.

Like most libraries that have been around for some time, we have already invested heavily in print material, in a heritage collection – we are not just going to throw it all out.

2. Archiving.

There is the question of archiving. How can we be sure that the publisher will maintain a permanent archive? At present there is no legal requirement for electronic/digital material to be placed in a national depository in the UK.

3. Continuing Access.

If we cancel a title or the licence is terminated will we still be able to access the "issues" we paid for?

4. Transient Technology?

Will the medium itself degrade or be replaced? In the late 1980s, as we all moved from microfiche, we were told that CDs would last forever, but we have since discovered that their average life span is ten to fifteen years.

5. Timeliness.

Will the electronic edition be available simultaneously, before or after the printed version?

6. Restrictive Licence Conditions.

Who do the publishers define as our "users"?

Can the journal be accessed off-site using passwords? Although we might be able to use a proxy server for remote users if IP registering is required.

Can you print out multiple copies of an article or download?

7. Printing Costs.

Since most of our users seem to prefer the printed copy.

8. User's Time

Identifying and locating electronic resources takes more time than for print sources (Tenopir and King, 2001). Printed journals are easier to browse and more portable.

9. Financial Flexibility.

Lack of financial flexibility as publishers often require licence agreements to last more than one year.

10. Expensive.

Financial costs can increase. Many publishers require you to maintain, in line with inflation, your existing subscriptions to printed journals before you can subscribe to any of their electronic titles. And with electronic journals costing 7% to 8% on top of print this isn't cheap (Pinfield, 2001). Also, in the UK, printed journals and books are VAT free but e-journals are considered a service by Customs and Excise and so incur a 17.5% VAT payment.

11. Irrelevant Titles.

Often you have to buy packages of "bundled" titles so that you are paying for titles that are irrelevant.

12. Library Staff Time.

Negotiating and administering licences is time consuming.

Before moving onto the other barriers, or should we say challenges?, to the fully digital library, if you are wondering what we decided to do with our journals, the answer is we asked for further comments from staff at the School, via email, on how they would like the journal collection to continue. After analysing the results and examining the practicalities we went for a typical, practical British fudge or compromise! We increased our number of print titles and took out subscriptions to the e-services ScienceDirect and Springer LINK. We were able to do this because we received additional funding and we think there's no doubt that our presentation work helped to obtain this budget increase.

Other Barriers to the Digital / Hybrid Library

1. At present users are faced with a plethora of usernames, passwords, interfaces, access restrictions and copyright restrictions. All of which hinder seamless access.

2. Many publishers are still unwilling to give permission for digitisation - around 35-40% of all requests are refused (SCONUL, 2000). It's also not cheap. In the UK HERON is a national service for higher education which organises copyright clearance and digitisation. It costs around 5p (8 cents) per page per student and Stephen Pinfield reported that it was costing the University of Nottingham an average of £93.89 (147 Euro) for each text (Pinfield, 2001). One study even concluded it was cheaper to buy print for a reserve collection (Halliday and Oppenheim, 2001).

3. Teachers and students must be computer literate.

4. Computers with a high specification are usually required, both on and off campus, with associated high costs. The broadband Internet, which gives high-speed access, is only gradually being made available across the UK.

5. Technical problems with computers, such as crashing and slow online connections.

6. As yet there are no agreed standards for describing all objects. Again this hinders us providing seamless access as it's not easy to cross search records. Even cross searching between library catalogues is a problem

because of the different ways MARC has been used in different libraries. Z39.50 hasn't proved to be problem free.

7. Library staff workload increases and new skills need to be learnt.

8. Lack of social interaction (Edwards, 1998).

9. The 'appropriate copy problem'. Linking technology is available between different electronic services. For example you can search a bibliographic database and then display the full-text of an item. However, the links don't always represent a library's subscription, leading to confusion and disappointment.

10. User expectations are very high. There does seem to be an attitude that electronic resources, particularly the Internet, is the font of all knowledge and that it's free - we frequently hear "So why doesn't the Library have the full-text of this e-journal?".

11. There is an increased likelihood of creating what Joan Day described as "the satisfied inept" (Law, 1997). An example being the user who has searched the Internet and thinks they've done so correctly and has found out all they need to know - when in fact they haven't.

The Advantages

We are very aware that all we've just said sounds terribly negative! But of course there are advantages to electronic information - including ease of availability, enhanced functionality, space saving and ease of collecting usage statistics.

The fact is, at the School, even before we started exploring the possibilities of e-journals, e-books and digitisation we were already using electronic information. We subscribed to a range of CD-ROM based and online bibliographic databases, provided our users with access to computer aided learning packages from the Pharmacy Consortium for Computer Aided Learning (PCCAL), had access to the Internet and increasingly were receiving printed textbooks with CDs and Web links.

Although the jury is still out on the benefits of Problem Based Learning (Cisneros, 2002), the beliefs at its core, of student-centred, life-long learning, are very much part of the present and the foreseeable future of education and these are related to Virtual Learning Environments. There is no going backwards with the technology.

Medical and pharmaceutical academics, and professional organisations are embracing information communications technology and are investing in, or investigating, e-learning and VLEs (Andrew, 2000; Anonymous, 2000; Sosabowski, et al., 1998).

There are many initiatives to try to overcome the barriers that we talked about earlier, so the future is far from bleak.

It does seem that the hybrid library is developing and we just want to make sure our users utilise the best resources available, whatever the medium.

The School of Pharmacy - a Hybrid Library?

At The School of Pharmacy we have a long way to go to be anything like a true Hybrid Library, but then, we think because of the barriers that we talked about earlier, so do most other libraries.

Our present situation is that we have electronic resources and an extensive print collection.

Our Hybrid Aims

Initially what we want to achieve is to make our users aware of the different types of information available and know how to locate the most appropriate resource for the task in hand. We do not want people to be afraid of the new technology, but we also don't want people to dismiss the printed material. We want to make access to all our materials as easy as possible and make sure our users know how to use the different types of media.

How Have We Tried to Achieve Our Aims in 2001/2002?

We undertook a review of the literature on the hybrid library, and the electronic/digital library, to see how other institutions were coping and from this, and our own experience, we drew up the following list of how to try and make a difference.

1. Firstly, we studied our user profile and discussed their special needs and wants.

The HyLiFe Project (HyLiFe, 2002), drew up a list of problems that users face when trying to access information. We found most of these matched our users'. I am sure you can all relate to these;

Problems accessing printed information:

- i) Items on OPAC not found on shelves.
- ii) Books disorganised/left on tables by other users.
- iii) Not enough core text books.
- iv) Too many books on short term loan or quick reference, but no copies on shelves.
- v) Loan period too short
- vi) Slow delivery of ordered books.
- vii) Journals disorganised or missing.
- viii) Journals vandalised.
- ix) Subject resources located on different floors/

Problems accessing electronic information:

- i) Not enough computers available.
- ii) No access to University network at study centres or in work placement locations e.g. hospitals.
- iii) Requirement for multiple passwords.
- iv) Copyright.

Problems with technology:

- i) Hyperlinks not working.
- ii) Slowness of the WWW.
- iii) Difficulty and cost of printing retrieved documents.
- iv) Lack of technological support

To the latter list we would add lack of IT skills.

2. We have always placed a high priority on training library staff and because we have a small staff complement everyone has to know a little bit about everything. What we did do is go over with our Library Assistants what was available in the library. We also spent some time discussing how to interpret users' enquiries. To give an example of this - occasionally we'll have a student asking how to use a bibliographic database, when in fact what they want to know they will find in a reference book.

3. We began to re-develop our web site to introduce all the types of resources.

4. We began to add electronic resources to our OPAC so users can see print and electronic listed together.

5. We examined our 'discovery vehicles', our web site and our OPAC, as easy to use as possible. We didn't want people to be put off using them and we wanted to minimise the amount of user education required.

6. We revised our user educational programme. All of our aims required education of all our users - in fact with a priority given to the academic tutors. There is no doubt the students follow their tutors' leads - and of course that is what they are supposed to do! SCONUL has listed seven major information skills for higher education - but I think you'll agree that they apply to all information seekers (SCONUL, 1999). These are;

- i) The ability to recognise a need for information.
- ii) The ability to distinguish ways in which the information 'gap' may be addressed.
- iii) The ability to construct strategies for locating information.
- iv) The ability to locate and access information.
- v) The ability to compare and evaluate information obtained from different sources.
- vi) The ability to organise, apply and communicate information to others in ways appropriate to the situation.
- vii) The ability to synthesise and build upon existing information, contributing to the creation of new knowledge.

To devise an educational programme for our users, with the hybrid library in mind, we decided to undertake a pilot study looking at only a section of the undergraduate, MPharm, Pharmacy course. We chose Course F, which comes in the third year of what is a four year degree, and involved 137 students undertaking individual projects under the guidance of an academic tutor. We used questionnaires, online transaction logs and informal discussions before, during and after the pilot to create the programme and to gauge its impact. The Programme consisted of;

1. Introductory Lecture on Information Skills – this included "why you need to know this!", the different types of media and creating search strategies. This was timetabled into the curriculum.
2. Presentation on Searching Electronic Bibliographic Databases.
3. Presentation on Searching the Internet for information.

Before the Programme we discovered only 8.76% of our Course F students were registered with Athens accounts, so they were not using our Library provided online bibliographic databases. This was even more disappointing when we found that 56.98% who answered our first questionnaire (it was completed by 62.77% of the pilot group) had used the free online Medline, PubMed. It wasn't that they didn't need bibliographic databases – they just were not using the ones we had paid for. After the Programme the number of Course F students with an Athens account rose to 56.98% and the number of online logins increased from 5 (First Semester) to 725 (second Semester). More undergraduates from this Course than any other registered themselves for user profile accounts on ScienceDirect after the Programme began. Internet search engines were very popular with the students, but very few were aware of the specialist gateways – this improved as the Course F took place. When discussing with the students their search strategies during the Course, the majority listed printed sources they had found useful and they were aware of the stages of devising a strategy – to try the key reference titles and textbooks first for background reading. In our Library this really means print. All students listed printed books and journals in their project references.

7. We made moves to increase co-operation between ourselves and other sections of the College. Academic staff are interested in developing VLEs and of course there is an opportunity here for us to demonstrate how we can help - how we can link the hybrid library into this scenario. Our specialist traditional skills of acquisitions, cataloguing, classification and enquiry handling have become even more important.

The introduction of PBL (Problem Based Learning) had already highlighted the library's teaching role and had given the library an opportunity to be included on curriculum committees. The hybrid library and VLEs allows us to further build on this. As we mentioned earlier the Chief Librarian is Head of the Computer Unit in the School and although the academic staff might not immediately think of involving the Library in their VLE discussions they inevitably do think of contacting the computer service. So, the Chief Librarian gains the opportunity to explain the advantages of involving the library.

We also wanted to help with the School's embryonic VLE by bringing to the attention of the academic staff the issues of electronic copyright and data protection.

Co-operation with Computer Unit personnel continues to increase in importance. Interestingly amongst our users the roles of the IT and Library staff have become blurred. We often find ourselves being asked software installation queries.

8. We provided more PCs with network connections in accessible areas - some designed for quiet study and some for group discussion. Because our Library is not open 24 hours a day this did mean finding space in other parts of the college.

9. We examined our budgetary distribution and we tried to obtain a budget increase.

We have made a point of informing the academic staff, who determine our budget, and the students, who influence them, of the costs and the benefits of new services. Indeed we try to emphasise the benefits - what it can do for them personally.

As we mentioned earlier we did obtain some extra cash for some new journal subscriptions and this year, in April, we also managed to get a post upgraded when it became vacant, so that we could attract a professional - but that has been all. It does seem to be that we are expected to move forward and provide, in parallel, increased electronic and print services without the corresponding increase in budget or staffing. I am sure most of you can relate to that.

What we have found is that if we provide a new service and it proves popular we can then, sometimes, obtain additional funding to keep it going. To do this does mean that we have to let some other backroom jobs, that are not obvious to the users, develop a backlog and/or do the work in our own time.

We realise that these are controversial methods. However, we do want to provide a good service and we certainly don't have a captive audience or a guaranteed budget. With our central London location we are surrounded by other libraries, that overlap with our subject coverage, although none has our depth. But it's not inconceivable that the people who control our budget would decide, however mistakenly, that it would be cheaper to get their library services from somewhere else.

Higher education in the UK is certainly no longer an ivory tower. Our institution has to fight for every penny. We are surrounded by larger academic institutions who can seem a little predatory at times - there have been a lot of mergers, or should I say take-overs, in London during the last ten years. We are also faced with the introduction of two new UK Schools of Pharmacy in 2003. Ultimately our library must prove it's worth. We are constantly being evaluated, often informally by our users, but also formally by The Higher Education Funding Council for England, The Quality Assurance Agency, the Royal Pharmaceutical Society and various charities, businesses and other organisations that provide our people with grant money - but then perhaps that's the way it should be or though it does seem to involve a lot of paperwork and meetings.

That we have been able to persuade Library staff to sometimes put in extra hours, or to accept that senior members of library staff are not available, for the moment, for the more routine tasks or to give immediate advice on the less important day-to-day issues does owe a lot to luck. It is to a great extent down to personalities - that people have been there long enough to have a sense of loyalty to the place, to realise how the institution works (that sometime it's pain before gain) and have a sense of professional pride. No-one wants to work in a failed institution and on a very personal selfish level we all want our CVs to look good! But I also think it's partly due to the Librarian's people skills. A "please", a "thank-you", an explanation of what is going on and the odd bottle of booze on a Friday, go a long way!

Problems Achieving our Aims in 2001/2002

1. Time / Budgetary Constraints

Lack of staff time to dedicate to the project has been our biggest challenge. We certainly think we're understaffed to begin with and it didn't help that for most of the period June 2001 to June 2002 we were down by one on our usual professional complement. When we were up to our usual understaffed complement, in this period, it was because we had a new member of staff who we were training - which of course takes experienced staff away from their usual duties.

The extra undergraduate students the College enrolled in October 2001 did not help library staff time - it was an increase of 33% over the previous year's new student intake. We also had three new research groups join the college - from Aston University, the University of Nottingham and the University of Bradford.

This meant we were not even able to complete a modest target of including all our electronic journals on our OPAC! This has now been done.

2. Physical Space

Several areas of the College have been developed over the last three years for student computer access and group study. However, because the School does seem to be successful in attracting research groups (and of course this is a good thing) - we have just had another start this Summer, from the Institute of Cancer Research - and because of our central London location, it is difficult for us to extend the building. So, space is at a premium. We have been able to increase our number of PC and study spaces, but they are not necessarily in the best locations. The College is undertaking a major building and space reorganisation programme to convert under-utilised space, for example a car park, into research and teaching spaces. So, we hope that we will be able to reposition some of our group study tables into an area closer to the Library and move some PCs into places highly visible to the students. But this isn't guaranteed.

Conclusion

So, is the hybrid library double trouble when it comes to user education? At the stage we are at now, which is not the true integrated hybrid library, it does at times feel like the answer is yes.

The number of different types of resources we have to provide are confusing for our users - although the gains outweigh the pains. For us, as librarians, if I may borrow Prime Minister Tony Blair's phrase, it's all about "education, education, education" for our users and ourselves. It's important we start at the top - we've got to get the academic staff into training sessions or if that's not possible, for practical or political reasons, to engage them in discussions enough so that they know when to approach the library for information.

At the School we need to dedicate time to not just discovering existing resources but creating new electronic sources - lecture notes and exam papers for example. We want to be at the centre of the School's developing VLE. A VLE which we hope will reach out beyond the confines of the College to the wider community of professional pharmacists, other healthcare professionals and biomedical scientists.

A big issue is going to be the cost of electronic resources. In particular journals and digitised books. We need to engage with our users on the issue - and not just by complaining about the expense, but also by encouraging researchers to think about ways of holding onto to their copyright.

But we must not forget the traditional materials and the basic library housekeeping tasks that make life easier for our users. For example we've decided we are going to use evening assistants during term-time to tidy the book shelves on an on-going basis, rather than doing a "one-off" tidy every vacation. We are now also willing to photocopy journal articles for academic staff who make a request.

We are looking at cultural change as well as technological. But of course libraries are constantly evolving and we will have to continually evaluate our aims, and our work in support of those aims. Something which we have always done.

For us at The School of Pharmacy the greatest step has been made – in that we are now aware of the issues surrounding the hybrid library. Now we must try to ensure that our users do.

References

- Andrew M. (2000). Use of web-based learning to teach pharmacy undergraduates. *Pharmaceutical Journal*. 265, 558-562.
- Anonymous (2000). Nottingham pharmacy school launches online diploma. *Pharmaceutical Journal*. 264, 869.
- Armstrong, C., Fenton, R., Lonsdale, R., Stoker, D., Thomas, R., Urquhart, C. (2001). A study of the use of electronic information systems by higher education students in the UK. *Program*. 35, 241-262.
- Brophy, Peter. (1999). The eLib programme. *Relay*. (47), 5-7.
- Cisneros, R.M., Salisbury-Glennon, J.D., Anderson-Harper, H.M. (2002). Status of problem-based learning research in pharmacy education: a call for future research. *American Journal of Pharmaceutical Education*. 66, 19-26.
- Edwards, C., Day, J.M., Walton, G. (Eds.). (1998). *Monitoring organisational and cultural change: the impact on people of electronic libraries: the IMPEL2 project*, Joint Information Systems Committee, 1998.
- Halliday, L., Oppenheim, C. (2001). Economic aspects of a national electronic reserve service. *Journal of Documentation*. 57, pp. 434-443.
- HyLiFe. (2002). Users. In: *The HyLiFe hybrid library toolkit*. [<http://hylife.unn.ac.uk/toolkit/>].
- Law, D. (1997). Parlour games: the real nature of the Internet. *Serials*. 10, 195-201.
- Oppenheim, Charles., Smithson, David. (1999). What is the hybrid library? *Journal of Information Science*. 25, 97-112.
- Pinfield, Stephen. (2001). Managing electronic library services: current issues in UK higher education institutions. *Ariadne*. (29). [<http://www.ariadne.ac.uk/issue29/pinfield/intro.html>].
- SCONUL. (1999). Position paper: information skills in higher education. [<http://www.sconul.ac.uk/publications/99104Rev1.doc>].
- SCONUL. (2000). The e-university - a briefing note. [<http://www.sconul.ac.uk/bfgnote.doc>].
- Sutton, S. (1996). Future service models and the convergence of functions: the reference librarian as a technician, author and consultant. In: Low, K. (Ed.) *The roles of reference librarians: today and tomorrow*. New York: The Haworth Press, pp. 125-143.
- Sosabowski, M.H., Herson, K., Lloyd, A.W. (1998). Implementation and student assessment of Intranet-based learning resources. *American Journal of Pharmaceutical Education*. 62, 302-306.
- Tenopir, C., King, D.W. (2001). The use and value of scientific journals: past, present and future. *Serials*. 14, 113-120.