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CD ROMs at the University of Wollongong: a case study

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Abstract
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Disciplines
Arts and Humanities | Social and Behavioral Sciences

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IMPLICATIONS OF CD-ROM TECHNOLOGY ON THE USE OF AND ACCESS TO INFORMATION BY TERTIARY STUDENTS

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Wollongong NSW 2500

CD-ROMS AT THE UNIVERSITY OF WOLLONGONG: A CASE STUDY
Craig Grimison

ABSTRACT

The University of Wollongong Library purchased 21 bibliographic databases on CD-ROM during 1988, 1989 and 1990 covering the disciplines of business, psychology, medicine, geography, sociology, education, science, nursing, engineering, mathematics and occupational health and safety. The databases are available for use by all students and staff, and their use is continuing to be evaluated.

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CD-ROMs at the University of Wollongong: a case study

Craig Grillison

University of Wollongong Library - Background

The University of Wollongong supports a student population of approximately 8,000, 6,900 undergraduate students and 1,100 postgraduate students with an academic staff of 450 and an academic support staff of 680. Founded in 1962 as a college of the University of New South Wales, the University has grown rapidly since this time and is expecting to cater for a student enrollment of 10,000 by the early 1990s. It now offers academic programmes in 7 faculties: Arts, Education, Science, Health and Behavioural Sciences, Engineering, Commerce and Informatics.

The University has a reputation for responding quickly to changes in the political, educational and economic environments, largely because of its size (being one of the smaller tertiary institutions) and also because of its flexible approach to academic programmes. It is against this background that the library has planned its services, by "maintaining the ability to respond quickly to the changing needs of the university while providing maximum support for basic, ongoing activities".

In order to achieve this, the library commenced a process of strategic planning in 1987. The process resulted in the identification of a number of primary aims and key results. The primary aims of the library were identified as:

a. To provide bibliographic, physical and intellectual access to recorded knowledge and information necessary to support and enhance the teaching, research and administrative activities of the University of Wollongong;

b. To develop policies and practices which ensure that collections, services and resources are managed efficiently and economically;

c. To cooperate with other institutions and organizations to develop and maintain the library, archive and information resources of Australia;

d. To take an active role in the adaptation of technology to improve the access to information;

e. To protect and conserve the library, archive and information materials acquired by the University; and

f. To support the activities of the University in the local community.

Of particular importance to this paper is aim d. "the adoption of technology to improve the access to information". This was recently reinforced in a internal report "The University of Wollongong Library. Planning 1990-1995".

CD-ROM Services - Background

Given the commitment to improving access to information through technology, the library first investigated the introduction of CD-ROM services in 1988, with the purchase of 3 bibliographic databases on CD-ROM: ERIC, Dissertation Abstracts and Supermap. As the reaction to these products was positive, the library purchased an additional six databases, Medline, Sociofile, ABI/Inform, Psychlit, Business Periodicals Index and Sociofile at the end of 1988. These were selected on the basis of consultation between library staff and the faculties, in particular the information gathered by the Faculty Librarians who are responsible for information services to academic departments. In addition, the Technical Services Division also purchased the Serials Directory, Whitakers Books, and Bowker's Books in Print Plus, for use in bibliographic verification.

The databases were originally purchased for only 12 months subject to renewal at the end of this period, essentially because of the cost and the newness of the service. Statistics were recorded of use during 1989, (and continue to be in 1990) and as a result only one database was cancelled, although it was decided to cancel the hard copy for another. No charge has been levied for using the CD-ROMs.

As a result of the use of these CD-ROM products, and the demand expressed by students and staff for databases in other disciplines, the library purchased an additional eight databases at the end of 1989. The use of these is yet to be evaluated in any formal sense, as some of the databases have only arrived recently. Again, the databases were purchased as a result of consultation between library staff and faculty staff although priority was given to databases which supported facilities for which we previously had no coverage. The databases ordered at the end of 1989 were Academic Index, Biosis, Cinahl, Compendex, Mathsci, Osh-Eom, Science Citation Index and Social Sciences Citation Index. In addition to these, Austree and Australasia on Disc 3 were ordered in the first half of 1990, (see Appendix A for list of CD-ROMs as at July 1990).

Usage of CD-ROMS

"The widespread use of CD-ROM in academic libraries has improved access to information, while creating new challenges for users and librarians. To make the best use of these systems, researchers must intelligently evaluate the wealth of information they can obtain independently. Accordingly, libraries must deal with the increased demands on collections, services and staff that are a direct result of making information more accessible to more people."

This is substantiated at the University of Wollongong Library where users have responded enthusiastically to the introduction of CD-ROM services. Though the library took a cautious approach to their implementation at the outset, the response has exceeded expectations, despite the fact that publicity has been limited essentially to word of mouth and reader education sessions, although, at 1990 the Library did produce a printed guide to Compact Disc Databases held in the library, as well as printed user guides to the various systems and databases.
As can be seen from Table 1, the number of searches conducted on CD-ROM databases during 1989 was substantial, particularly for those databases which related to heavy enrollment courses, e.g. ABI/Inform, Psychlit, ERIC and Sociofile.

<table>
<thead>
<tr>
<th>Database</th>
<th>Searches</th>
<th>Staff</th>
<th>P/G</th>
<th>U/G</th>
<th>Time (hrs)</th>
<th>Training</th>
<th>Sessions</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABI/Inform</td>
<td>827</td>
<td>63</td>
<td>224</td>
<td>677</td>
<td>692</td>
<td>119</td>
<td></td>
</tr>
<tr>
<td>Business Periodicals Index</td>
<td>30</td>
<td>4</td>
<td>5</td>
<td>22</td>
<td>23</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>Dissertations Abstracts</td>
<td>64</td>
<td>28</td>
<td>37</td>
<td>11</td>
<td>54</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>CCINFO</td>
<td>7</td>
<td>6</td>
<td>1</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>ERIC</td>
<td>259</td>
<td>74</td>
<td>166</td>
<td>103</td>
<td>207</td>
<td>58</td>
<td></td>
</tr>
<tr>
<td>Medline</td>
<td>285</td>
<td>53</td>
<td>57</td>
<td>192</td>
<td>226</td>
<td>42</td>
<td></td>
</tr>
<tr>
<td>Psychlit</td>
<td>411</td>
<td>50</td>
<td>109</td>
<td>333</td>
<td>329</td>
<td>61</td>
<td></td>
</tr>
<tr>
<td>Sociofile</td>
<td>157</td>
<td>52</td>
<td>28</td>
<td>85</td>
<td>101</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>Supermap</td>
<td>41</td>
<td>30</td>
<td>-</td>
<td>17</td>
<td>44</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>2,111**</td>
<td>360</td>
<td>627</td>
<td>1,227</td>
<td>1,078</td>
<td>326</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* CCINFO was purchased late in 1989 as a support tool to the University Health and Safety Officer.

If a search was conducted by more than one person, this was recorded as one search, although students were still counted individually.

These databases, were originally targeted at academic staff and post-graduate students on the assumption that these user groups were likely to be conducting more in-depth bibliographic searches. However, it soon became clear that those databases were of interest to the total student population. This is reflected by the large number of undergraduates that used the various databases, a total of 55.4%. As described by Michalak "Undergraduates, in particular have benefited from free access to CD-ROM. CD-ROM has allowed access to computer based information services to more users than could ever be reached through mediated online searching."

Also of note is the reduction in the number of online searches conducted. In 1988, 170 online searches were conducted, while 1989 the figure reduced to 115. This is perhaps a reflection of the ability to perform one's own search at one's own convenience and also the fact that no charge has been levied for CD-ROM searches. Charges are normally levied for online searches, essentially to cover the cost of the search, as no administrative fee is charged.

Survey of Users at the University of Wollongong

While the response to the CD-ROM service has been overwhelmingly positive, the need to more formally evaluate the implications of the service became apparent during 1989.

Although we were aware, through observation of some of the more obvious implications, e.g. a decline in the number of online searches, and the decline in the use of hard copy indexes, we were not aware of all the implications, such as, the success of the CD-ROM searches or the reasons why CD-ROM databases were being used, were CD-ROMS simply being used by a "computer-curious" user population, who were attracted by the technology? To quote from an article by Kim Scholtz and Kristine Salamon, who conducted a similar survey at Oakland University, Rochester, Michigan, "While it is important that the Library community (the CD-ROM buyers) look favourably upon this new technology, it is also necessary to assess the end user's response to CD-ROM.

The University of Wollongong Library therefore surveyed, by questionnaire, both students and academic staff over a period of four weeks during April-May, 1990. (see Appendix B and C for copies of the questionnaire) The questions were aimed at seeking feedback on such areas as, the success of the CD-ROM search, the value of the CD-ROM database to their research, the ease of use of the CD-ROM databases. Some of the questions were similar to those asked in the 1987/1988 Butler Reference survey of Columbia libraries. Unlike many other surveys conducted to date, our survey did not focus on the structure of the user's search, nor did it seek to evaluate particular databases.

Academic staff were surveyed separately as we required additional information from this group, e.g. their willingness to cancel hard copy indexes in favour of CD-ROM databases. Survey forms were sent to all academic staff.

Survey Results

Student Survey

This survey was conducted as users borrowed the CD-ROM discs at the Information Desk for use on the CD-ROM machines in the Library. Completed questionnaires were returned with the CD-ROM disc on completion of the search. Over the four week period 160 questionnaires were returned. The results served to confirm many of our observations about users attitudes towards the CD-ROM service and should assist us in making future decisions about such issues as networking, access to serials literature, training, collection management and evaluation of data bases.
As expected, the main users were students, with 94% of users registering as either postgraduate or undergraduate students. Undergraduate students formed the majority of the group with 65% of users falling into this category. Unfortunately, the questionnaire didn't ask for details of which year the student was enrolled in; however, from observation at the Information Desk, it appears the majority of students would have been either 2nd or 3rd year students. This result confirms the trend established in 1989 and recognizes the importance of CD-ROM searches to undergraduate students. Original assumptions that postgraduate students would be the main users of CD-ROM has proved to be incorrect. As previously mentioned Joseph Michalak of SilverPlatter Information Inc., also confirms this by describing the undergraduate student population as the main beneficiaries of CD-ROM services. We are consequently faced with a much larger target group for training than previously expected.

In terms of training, 60% of users indicated that they learnt how to use CD-ROM databases with assistance from library staff, either individual assistance from the librarian or by participating in library group demonstration. Only one person indicated that they had used the guides prepared by the library. While 33% indicated that they were trained by colleagues or friends. Given that 94% of users felt that their training was successful, this result has implications for how we train people in the future. Unfortunately, to date, the various CD-ROM systems which are available are not user friendly enough to remove the need for assistance. A survey of CD-ROM installations at Hahnen University Library found that only four percent of respondents were able to learn the systems without reference to documentation or third party assistance. At the University of Wollongong Library, we have decided to discontinue offering individual training sessions on demand because of the staffing implications. Instead we have been experimenting with regular weekly group training sessions which still allow "hands on" experience for the participants. The classes are limited to 18 however because of the number of work stations available. While this is somewhat of a compromise it is a more manageable solution to the question of training.

One of our primary concerns about the use of CD-ROM databases, is the expectation by students that the library will hold the journals indexed in the CD-ROM databases. While it is true that after conducting a CD-ROM search, students may end up with a comprehensive printout of serial articles, it is often true that the library will not hold all the serials listed. 70% of users indicated that they didn't hold most of the serials identified in their searches. As suspected also, a large number of users (50%) indicated they would be content with what was held in the library, although a larger number than expected (40%) used the collections of other libraries. This has implications for ensuring bibliographic access to other collections. This result confirms the attitude of some reference librarians who now feel that the printed bibliographic tools are being ignored. Students who may be able to gain the information they need through a simple search of a printed index will still prefer to use a CD-ROM product. The users' perception appears to be that the CD-ROM product is easier and quicker to use. Of course this may not always be the case, particularly if access to the CD-ROM products is limited by the number of work stations available.

Printed versions do allow multi-user access, although networking of CD-ROMs could also solve this problem. The University of Wollongong Library is currently finalising an agreement on networking most of its CD-ROM products. This will allow the networking of 20 CD-ROM discs which will initially be available from any of the personal computers connected to the Library local area network. This includes seven CD-ROM work stations and 12 personal computers in the PC laboratories which are housed in the Library. Unfortunately, networking CD-ROM products does attract network licence fees which can be as much as 50% of the current price. This will provide further pressure to cancel hard copy versions. It also implies that only those CD-ROMs that will benefit substantially from networking, should be networked.

As publicity about the CD-ROMs was limited in their first year of operation to advertising through Faculty staff, it was not surprising that a large number of users (46%) indicated that they became aware of the CD-ROM databases through word of mouth. The next largest group (24%) indicated that they became aware of the CD-ROM databases through library tutorial sessions. As the survey was conducted before we commenced regular group training sessions, these users would most likely have been 1st year accounting students for which training sessions had been conducted in lecture theatres using a projection pad to demonstrate searching techniques. This result confirms the popularity of CD-ROM products, as it is doubtful that printed indexes would have become so popular with this limited publicity.

Interestingly, 90% of users indicated that they had increased their use of serial literature, as the result of searching CD-ROM databases. Presumably students are finding more journal articles than they would have previously, either using the print tools or searching for serial articles at the shelves. One could speculate also, that even though the library may not hold a particular title, the user may be more inclined to investigate other titles in the library or elsewhere. It would be interesting to know if the standard of student's course work has increased as a result of this increase in serial usage.

Of some concern was the large number of users who were not aware of the existence of print versions for some of the CD-ROM databases. 93% of users indicated that they were not aware of the existence of a print version. Even so a large number of users (51%) indicated they would prefer to use the CD-ROM version, for reasons of convenience and speed. This confirms the attitude of some reference librarians who now feel that the printed bibliographic tools are being ignored. Students who may be able to gain the information they need through a simple search of a printed index will still prefer to use a CD-ROM product. The users' perception appears to be that the CD-ROM product is easier and quicker to use. Of course this may not always be the case, particularly if access to the CD-ROM products is limited by the number of work stations available.
The response to the question on charging for access to CD-ROM databases was no surprise. 4% indicated they would pay for access, while 47% indicated they would not pay and another 47% indicated they would be prepared to pay something but it would depend how much. This has also been confirmed elsewhere. Beth Joehl and Anita Iocoy found in a survey of CD-ROM users at the Butler Library, Columbia University, that most users felt they should not pay anything for the service, "CD-ROMs were regarded as a service, albeit a wonderful service that the libraries were obligated to provide free". The University of Wollongong Library has recently introduced charging for the printing of citations. While this charge is seen as acceptable (certainly it has had no marked affect on usage) limits seem to apply even for printing, given the number of users who are now down-loading their results on to their own discs. Many of the comments in the final question, which allowed users to make additional comments were directed to the question of charging. Users felt that as this was a library service, there should be no charge. Other additional comments (see Appendix D) also dealt with questions raised elsewhere, i.e. the lack of serials in the library, access to the CD-ROM work stations and instruction on the use of the databases.

Academic Survey

Not surprisingly, the response rate for the survey of academic staff was not as high as that of students. Unfortunately only 20% of academic staff responded to the survey and so the results must be interpreted cautiously. On the other hand patterns still emerged which confirmed observations. While some of the questions were the same, different questions were also included on this questionnaire. These were included to illicit feedback about such issues as, cancellation of print versions, the use of online searches, and staff's expectation of student use of the databases.

Academic staff's knowledge of the CD-ROM databases was higher, with 91% of staff aware of the general range of databases available. The academic staff who used the CD-ROM databases represented a wide range of academic departments, with no one department dominating. Compared with student use where certain databases were used heavily, particularly the business, psychology and medical databases, academics used a range of databases, presumably reflecting their wider research interests.

50% of staff found the databases easy to use, however by far the majority, (63%) were trained by librarians, either individually or in a group session. Given our structure of Faculty Librarians who provide information services to individual academic staff in faculties, this is not surprising. This result also seems to indicate the effectiveness of one to one training, particularly as 68% of users found the training successful.

Like the student survey, the majority of users, (81%) indicated that the library should hold the serials identified in their searches, yet a much larger percentage (83%) indicated that they would then order the articles online. This is quite understandable given their access to inter-library loan and also their willingness to wait for the information. A large group also (33%) indicated that they would visit other libraries to gain access to these serials. This may reflect the fact that academic staff are more used to using other collections for their research, but also too their ability to gain borrowing rights at other institutions.

Interestingly enough, by far the majority of academic staff (68%) expected their students to use the CD-ROM databases. It was our impression that academic staff would mainly support the use of CD-ROM databases for postgraduate students. While a number of academic staff indicated they thought the CD-ROM databases were more appropriate for postgraduate students, the general reaction was one of support for their use at all levels.

While the majority of students would prefer to use the CD-ROM version that the hard copy, academic staff seemed very reluctant to recommend cancellation of the hard copy version. Only 10% indicated that they were willing to see the hardcopy version cancelled in favour to the CD-ROM version. Even then certain conditions were indicated, e.g. print versions should only be cancelled if the money saved could be redirected to the purchase of more serials and easy access should be provided to the databases. The question of the cancellation of print versions is a vexing one, yet one that will have to be confronted, if libraries are to continue to fund the purchase of CD-ROM databases. Certainly, this will be the case at the University of Wollongong Library, where only one hard copy subscription (Dissertation Abstracts International) has been cancelled to date, in favour of the CD-ROM version. This is not uncommon. Silverman in her article about the use of CD-ROM in the libraries of the Pennsylvania Area Library Network (PALINET), reported that only one library had cut a print subscription in favour of a CD-ROM database, and this was a second copy of the print version of Readers Guide to Periodical Literature.

As already mentioned, the question of adequate access to the database seems to be the main stumbling block to the issue of hard copy cancellations. Perhaps the introduction to networking will make this decision easier.

Although online searches have decreased as a result of the availability of CD-ROM databases, only 17% of staff indicated that they were no longer using online searches (although 31% indicated that they didn't use online searches at all) 28% of staff indicated they still preferred to have an online search conducted, essentially because of currency, comprehensiveness of online databases and time saving, in fact 32% of staff indicated they used online searches because they provided them with the most up-to-date information. Clearly too, this indicates staff reluctance to cancel on-line services in favour of CD-ROM products. Although, given that online searches are conducted on a cost recovery basis, the funding implications are not so crucial.

Like the student survey, staff were not in favour of charging for the service, although 1% indicated that it would depend how much we were to charge. Additional comments however, indicated that if we were to charge then the print copy should not be cancelled.
Other additional comments (see Appendix E) focussed on the need to provide access to the CD-ROM databases through the campus network, primarily because of access to the databases in the library as well as the convenience of accessing the databases from academic departments and offices. It is interesting that this comment did not come out in the student survey, although perhaps this indicates academic staff's knowledge and use of the campus network, as opposed to students who are not generally accessing the campus network.

Conclusions

* CD-ROM databases have been well received by both staff and students. Despite our original assumptions, the databases are used by all levels of students, particularly undergraduate students and in fact the majority of academic staff expect them to be using these databases. This reinforces the case for equal access to the CD-ROM databases, for all students.

* While users indicated that they learnt how to use the databases by a variety of methods, the majority indicated they were trained by a librarian in a "hands on" situation. The majority of users also indicated their method of training was successful. While this supports the case for one-to-one training, at the University of Wollongong Library, this has proven impractical. It does mean however, that we will continue to offer tutorial size training sessions on a regular basis. These sessions will also allow for each participant to have some "hands-on" experience. We should also be lobbying the suppliers of the databases, to review their searching software to make it more user friendly.

* Students indicated strongly that their use of serial literature had increased as a result of using CD-ROM database. On the other hand, they also indicated the inadequacy of the library's serial collection. While the library should review its serial holdings against the serials indexed in the CD-ROM databases, it is clearly unrealistic to collect all these serial titles. We must ensure that users have easy bibliographic access to the serials holdings of other libraries. Such developments as the establishment of the Australian Academic and Research Network will certainly enhance this, although access to existing databases such as ABN and CIANN can already provide much of this information. Users should then be able to request the article on inter-library loan if appropriate, or use the article in the home library.

* Even though the majority of users expressed their preference for using the CD-ROM databases (as opposed to the print version) the majority of academic staff indicated that the print versions should still be retained. The reasons for this seems to be essentially based on inadequate access to the CD-ROM databases because of the limited number of workstations available. While it is clear that if we wish to continue to subscribe to the CD-ROM databases, we will be forced to cancel some hard copy versions, the possibility of networking the CD-ROM databases to allow access from any terminal connected to the University's campus network should greatly reduce the concern about access. Of course, by networking the CD-ROMS we also attract substantial networking licence fees.

* It will still be necessary to continue to provide on-line searching facilities, particularly for academic staff who use this service for the most up-to-date information. As on-line searches are conducted on a cost recovery basis, this should not impose a financial burden.

* Charging for access to CD-ROM databases would not be readily accepted by the majority of users. While most users seem to accept a charge for the printing of citations, they reject the notion of a fee for accessing the databases. They regard this as a service that the library should be providing free of charge.

It is evident that for the time being, CD-ROM databases are here to stay. They have been readily accepted by users, despite the difficulties in using them and seem to be now regarded as a standard service that libraries provide, free of charge. It is up to libraries to ensure adequate access and training yet still manage the obvious staffing and funding implications.

References

6. Ibid. p.63.
APPENDIX A

CD-ROMS HELD IN THE UNIVERSITY OF WOLLONGONG

JULY 1990

AUSTRALIA ON DISC 3
ABSTROM
AB/I/INFORM
ACADEMIC INDEX
BIOSIS
BOWKERS BOOKS IN PRINT PLUS
CINFO
CINAHL
COMPENDEX
Dissertation Abstracts
ERIC
MATHSCI
MEDLINE
CSH-ROM
PSYCLIT
SCIENCE CITATION INDEX
SERIALS DIRECTORY
SOCIAL SCIENCE CITATION INDEX
SOCIOFILE
SUPERMAP
WHITAKERS BOOKBANK

So that we can assess the usage of CD-ROMs in the Library and continue to improve the service we provide, could you please fill out the following questionnaire and return it to the Information Desk.

1. Please indicate the category of user to which you belong.
   - Postgraduate [ ]
   - Undergraduate [ ]
   - Staff [ ]
   - Student [ ]

2. What CD-ROM database are you using?

3. Is this the first time you have used a CD-ROM database?
   - Yes [ ]
   - No [ ]

4. Do you find the CD-ROM databases easy to use?
   - Yes [ ]
   - No [ ]

5. If not, why not?
   - Individual assistance by Librarian [ ]
   - Library group demonstration [ ]
   - Library guides [ ]
   - Working through the tutorial on the CD-ROM [ ]
   - Assistance by colleagues/friends [ ]
   - Other [ ]

6. How did you learn to search this database?
   - Individual assistance by Librarian [ ]
   - Library group demonstration [ ]
   - Library guides [ ]
   - Working through the tutorial on the CD-ROM [ ]
   - Assistance by colleagues/friends [ ]
   - Other [ ]

7. Was this method of training successful?
   - Yes [ ]
   - No [ ]

8. If not, why not?

9. As a result of CD-ROM searches, have you increased your use of serials (journals, periodicals)?
   - Yes [ ]
   - No [ ]

10. Do you find that this library holds most of the serials that you identify from the results of your searches?
    - Yes [ ]
    - No [ ]
11. If the Library doesn't hold the serials that you have identified, do you:  
- use only those serials that are held in the library  
- visit other libraries which hold the serials  

12. If you are a staff member or postgraduate student, have you found you need to use the Interlibrary Loans service, as a result of searching CD-ROM databases?  
No  
Occasionally  
Regularly  

13. Are you aware that there are print versions of some of the CD-ROM databases in the Library's Reference Collection?  
Yes  
No  

14. Do you prefer to use the CD-ROMS rather than the print version?  
Yes  
No  
Not aware of hard copy  

15. If so, why?  

16. Please indicate any other CD-ROM databases you have used.  

17. How did you find out about the CD-ROM databases?  
- Printed publicity  
- Word of mouth  
- Library tutorial session  
- Other  

18. If the Library charged for searching CD-ROM databases, would you be willing to pay?  
Yes  
No  
Depends now much  

19. Other Comments  

Thank you for your cooperation.  
Information Services Division  
University of Wollongong Library  
April 1990
10. If the Library doesn't hold the serials that you identify, do you:-
- visit other libraries which hold the serials □
- order the serial articles on Inter-Library Loan □
- make do with what can be obtained here □

11. Do you expect your students to use the CD-ROM databases?
Yes □ No □

12. If no, why not?

13. Do you think the Library should cancel the print version of this or other databases held on CD-ROM, in favour of the CD-ROM version?
Yes □ No □

14. As a result of CD-ROM databases being held in the Library have you discontinued using online searches?
Yes □ No □ Don't use online searches □

15. Do you still prefer to have an online search done for you, rather than use the CD-ROM version?
  a. Yes □ No □ Don't use online searches □
  b. Why?

16. Do you also use online searches to provide you with the most up-to-date information?
Yes □ No □ CD-ROM search is adequate □

17. If the Library charged for searching CD-ROM databases, would you be willing to pay?
Yes □ No □ Depends how much □

18. Please list any other CD-ROM databases that you feel the Library should purchase?

19. Other Comments

Information Services Division
University of Wollongong Library
April 1990
The fees we pay should cover the costs.

University students don't have much money. They can't afford to pay for CD-ROM usage.

The fees we pay should cover the costs.

Priority should be given to post graduate students.

I'd be prepared to pay for paper.

The CD terminal and disks are no different to any other library service which is not chargeable.

If the department refunded me.

A possible cost for CD's should cover purchasing additional serials.

The Library journal holdings is inadequate.

The Library needs to back order most of the business journals.

The Library doesn't usually hold the conferences I require.

Could the library provide an up-to-date listing of journals please?

I really enjoy using the CD's.

I need to use it for a longer period.

CD's are very convenient and very helpful.

Impressive, good idea, good system.

Sometimes you have to wait too long to use the machines.

Need to have typed, simplified instructions beside the computer.

Could there be a hard copy direction booklet available for loan with the disc?

It is possible to have all the computers turbo-charged? There is one which is turbo charged and searching on this is much faster.

Information Services Division
University of Wollongong Library
April 1990
Q19. OTHER COMMENTS

<table>
<thead>
<tr>
<th>COMMENT</th>
<th>NUMBER OF OCCURRENCES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access is a problem</td>
<td>3</td>
</tr>
<tr>
<td>Good quality information. Keep it up.</td>
<td>1</td>
</tr>
<tr>
<td>I use current contents - Librarians have expressed to me concern that Current Contents isn't being used. Let me assure you it is.</td>
<td>1</td>
</tr>
<tr>
<td>Statistics and Maths should be judged in the same way as (say) the Humanities. Our characteristics and needs are quite different.</td>
<td>1</td>
</tr>
<tr>
<td>Good addition to library services.</td>
<td>7</td>
</tr>
<tr>
<td>My major problem is due to infrequent use, so I forget how to use the database properly. So I much prefer on-line searches.</td>
<td>1</td>
</tr>
<tr>
<td>A system of a central disc reader, serving remote terminals (over the campus network) might help. It is technically possible.</td>
<td>1</td>
</tr>
<tr>
<td>Macintosh CD-ROM interface is much more user friendly than MS-PC-DOS.</td>
<td>1</td>
</tr>
<tr>
<td>If the CD-ROMS were accessible on our network, using a standard user interface, and not just on a PC with an idiosyncratic user interface, they would be much more heavily used, including by me.</td>
<td>1</td>
</tr>
<tr>
<td>Disappointing aspect is the libraries inadequate serial collection.</td>
<td>1</td>
</tr>
<tr>
<td>Print version should not be cancelled</td>
<td>1</td>
</tr>
<tr>
<td>CD-ROMS should prove to be the most versatile &amp; efficient abstract system in the future.</td>
<td>1</td>
</tr>
<tr>
<td>Having a user pays system is fine, if the users have money for that purpose.</td>
<td>1</td>
</tr>
<tr>
<td>Friendly service, much appreciated. Librarians are always pleased to help out.</td>
<td>1</td>
</tr>
<tr>
<td>Keep upgrading regularly and search new ideas.</td>
<td>1</td>
</tr>
<tr>
<td>If a charge is to be made then I don't support dropping the hard copy.</td>
<td>1</td>
</tr>
</tbody>
</table>

Craig Grimison

I am currently employed as Information Services Librarian at the University of Wollongong Library. As Information Services Librarian, I am responsible for the areas of I.L.L., Reference, Reader Education, Online Services, Circulation and the Audio-Visual collection. Prior to this appointment I held positions at the University of New England, NSW Department of TAFE and the Canberra College of Advanced Education. I also participated in an Internship program at Macquarie University Library in late 1987.

I have been actively involved in the Library Association of Australia and I am currently Vice-President of the NSW Branch of ALIA, Convener of the Distance Education Special Interest Group, and a member of the ACULS Working Party on Remote Users. I have also written articles on staff development and services to external students. I have convened a number of conferences and jointly edited Library Services for External Students: a guide, which was distributed to some 2000 libraries throughout Australia.

I have also been awarded the Blackwell's Bicentenary Scholarship for 1990-1991. This will allow me to pursue a management internship at a University in the United States or Britain during 1991.